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Based upon Survey of India map with the permission of the Surveyor General of India.
Chandigarh is also the capital of Haryana and Punjab.
The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.
The boundary of Meghalaya shown on this map is as interpreted from the North-Eastern Areas (Reorganisation) Act, 1971, but has yet to be verified.

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A REFERENCE ANNUAL

1976

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MINISTRY OF INFORMATION AND BROADCASTING
GOVERNMENT OF INDIA

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PREFACE

This is the twenty-third edition of the Reference Annual compiled by the Research and Reference Division of the Ministry of Information and Broadcasting. The Annual carries authentic information on diverse aspects of our national life, collected from official and other authoritative sources. For the convenience of readers seeking further details on specific subjects a bibliography is given at the end of the volume.

The special article 'Emergency and its Impact', at the beginning of the Annual, and a special appendix 'Essay in Discipline and Economic Regeneration' deal with developments that have taken place since the proclamation of Emergency on 25 June 1975. 'Emergency and its Impact' sets out the events leading to the proclamation of emergency and also describes the socio-economic measures adopted by the Government, under the 20-Point Economic Programme of the Prime Minister, and other changes that have taken place.

A few of the regular chapters have been restructured in this edition. The chapter on 'Agriculture' incorporates information on irrigation. The chapter 'Community Development and Co-operation' has been split into two: 'Rural Development' and 'Civil Supplies and Cooperation'. A new chapter on 'Energy' has also been added. It includes information on utilisation of all sources of power: coal, oil and gas, water, tidal energy, solar and nuclear energy. The chapter on 'States and Union Territories' includes a section on 'Sikkim' which became the twenty-second state of the Indian Union in April 1975. 'Laws of Parliament' has been brought up to August 1975 and 'Important Events' covers developments right up to the end of 1975.

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KEY TO NUMERATION

1 lakh = One hundred thousand

10 lakh = 1 million

1 crore = 10 million

EMERGENCY AND ITS IMPACT

On 25 June 1975, the President proclaimed a state of emergency,[1] in exercise of the powers conferred on him by clause (1) of article 352 of the Constitution. The proclamation said, "a grave emergency exists whereby the security of India is threatened by internal disturbance".

The proclamation came within hours of the announcement by the Opposition Front to launch a nationwide offensive to defy laws and as climax to the campaign to subvert democracy and to disrupt the instruments of constitutional authority, which began early in 1974.

Prime Minister's Broadcast

In a broadcast to the nation on the morning of 26 June, the Prime Minister explained the threat to internal stability in these words:

> "In the name of democracy it has been sought to negate the very functioning of democracy. Duly elected Governments have not been allowed to function and in some cases force has been used to compel members to resign in order to dissolve lawfully elected assemblies. . . . Certain persons have gone to the length of inciting our Armed Forces to mutiny and our police to rebel. . . . the actions of a few are endangering the rights of the vast majority. . . . the nation's integrity demands firm action."

Extra-Constitutional Campaign

As the official document "Why Emergency?", presented to Parliament in its July session, pointed out, the campaign to dislodge the duly constituted Government from power drew its inspiration from the happenings in Gujarat early in 1974, leading to the dissolution of the State Assembly. Certain Opposition parties and leaders saw in these events an opportunity to achieve results that they could not hope to gain through normal constitutional means. The forum of Parliament and legislatures was utilised to intensify the campaign. Shri Morarji Desai, who had threatened on 3 December 1974 to do 'dharna' inside the Lok Sabha, did, in April 1975 embark on an indefinite fast to force the Government to hold elections to the Gujarat Assembly at a time when the State was passing through an unprecedented drought.

In the agitation in Bihar which attempted to parallel the agitation in Gujarat, a "total revolution" concept was sought to be evolved. Its scope was to be countrywide. Shri Jayaprakash Narayan, who now spearheaded the campaign, toured several states to mobilise support and bring together heterogeneous parties and groups.

Large sections of the press gave all-out support to the extra-constitutional campaign by turning the spotlight on the activities of the leaders and parties engaged in it, and by giving extensive coverage to the accusations made by them against government and persons in office.

Climate of Violence

The institution of Prime Minister was consistently sought to be denigrated. Malicious and baseless charges were made against high dignitaries as part of a calculated attempt at character assassination. A climate of violence, disrespect for and defiance of authority and contempt for constitutional propriety was built up which could only lead to chaos and anarchy. The murder of the Railway Minister, Shri L.N. Mishra, in January 1975, was the direct result of this cult of hatred.

The judgment of the Allahabad High Court in the Prime Minister's

[1]For important events following the proclamation of emergency, See Appendix 11.

election case on 12 June 1975 was utilized to intensify this campaign of destabilisation. Disregarding the fact that the High Court had granted a stay of the operation of its verdict, and that the Supreme Court also granted a similar stay, these elements mounted a powerful campaign to compel the Prime Minister to resign. A group of Opposition leaders staged 'dharna' before Rashtrapati Bhavan, declaring they would not recognise the authority of the Prime Minister.

Pointers to Chaos

Plans were formulated for a nationwide agitation and continuous consultations were held in Delhi by the leaders of the five Opposition parties—the Congress (Organisation), Jana Sangh, Bharatiya Lok Dal, Socialist Party and Akali Dal. On 24 June 1975 the Joint Executive Committee of these parties adopted a resolution asking the Prime Minister to resign and threatened that if she failed to do so they would launch a countrywide movement including Satyagraha to force her to resign. The next day a 'Lok Sangharsh Samiti' was formed with Shri Morarji Desai as the Chairman and Shri Nanaji Deshmukh of the Jana Sangh as the Secretary. The campaign was to be launched from 29 June. At a mass rally on 25 June, on Delhi's Ramlila grounds, Shri Jayaprakash Narayan threatened to 'derecognise' the Government and said: "We would not cooperate with them (the Government); not a paisa of tax shall be given to them."

In the light of the campaign that had been waged for the preceding one year and a half, during which there had been repeated bandhs, gheraos, acts of violence and sabotage of railway and telecommunication installations, the Government could no longer ignore these pointers towards chaos.

Restorative Operation

The proclamation of emergency succeeded in easing the tension and restoring calm throughout the country. There was a welcome, though belated, recognition of the value of discipline, hard work, administrative efficiency, economic development and social progress. In taking measures to restore law and order and defuse the situation, the Government machinery did not have to resort to force at all.

Era of Discipline

Peace returned to the university campus. Self-appointed student leaders were deprived of their capacity to create mischief. Examinations were conducted in an orderly manner and the pernicious practice of copying was eliminated.

There was a steep decline in the widespread practice of ticketless travel following intensive raids by the checking staff of the railways. Earnings from passenger and goods traffic increased substantially as traffic bottlenecks were removed. There was a notable improvement in the punctual running of trains.

Attendance in Government offices showed a vast improvement and disposal of work became more prompt and efficient. An arrears clearance week was observed by the central government offices. A review of cases of officials who had attained 50 years of age or put in 30 years of service was undertaken to weed out the corrupt and inefficient. Over 2,000 officials were retired at the Centre and many more in the states. Cases of more than 50,000 others were under review by the central government.

TWENTY-POINT ECONOMIC PROGRAMME[1]

The Government was not content with mere re-establishment of law and order. It was keen that the new sense of national purpose should be harnessed to a speedier promotion of economic growth and social

[1] See Appendix 12.

justice. On 1 July 1975, the Prime Minister announced in a nationwide broadcast a "Twenty-Point Economic Programme" designed to achieve speedy development and to remove many of the evil practices which had persisted all these years, including bonded labour and rural indebtedness. It gave a further fillip to the official drive to contain inflation and root out black money. The programme was acclaimed by all sections of the people, notably farmers and landless workers, industrial workers, representatives of trade and industry, and students and teachers.

Industrial relations which had been bedevilled by strife, indiscipline, and neglect of production and productivity, were put on an even keel. Both workers and employers responded to the Prime Minister's appeal for harmony and higher production. A national apex body consisting of representatives of the national trade unions and manufacturers' organisations was set up. The apex body unanimously approved a scheme to achieve industrial peace and laid down broad guidelines. National committees for important industries like textiles were also set up.

Press Reforms

The press also was deeply influenced by the climate of discipline and responsibility, brought about by the Emergency. It may be recalled that some sections of the press had indulged in tendentious, provocative and unrestrained writings and thus encouraged, directly or indirectly, the forces of defiance, disruption and disorder. The Press Council, established under the Act of 1965, had proved ineffective in restraining them. The immunity granted under the Parliamentary Proceedings (Protection of Publication) Act, 1956 was widely misused as many newspapers gave extensive coverage, often on the front page with banner headlines, to baseless and irresponsible charges levelled on the floor of Parliament against persons in high office.

To ensure that the gains of the Emergency were not frittered away and there was no return to licence on the part of the newspapers three ordinances[1] were issued in December 1975; they sought to prevent the publication of objectionable matters, repeal the Parliamentary Proceedings (Protection of Publication) Act and abolish the Press Council. These measures were primarily intended to enable the Press to play its role in a responsible manner, free from the influence of disruptive forces and vested interests. Constructive criticism of Government and its policies and action would not be deemed to be objectionable. Adequate safeguards were provided against misuse of powers and provision was also made for respresentations and appeals by any aggrieved person.

Impact on Economy

To understand the swift and impressive gains in the economic sphere owing to the Emergency, the economic scene of the past few years has to be recalled. Since 1971, when the heavy influx of about 10 million refugees from the then East Pakistan placed an unbearable burden on the country's resources, the economy had been under unprecedented strain. In the wake of the Bangladesh crisis and the war which was forced by Pakistan, came a severe and widespread drought in large parts of the country. The sharp decline in food production and agricultural raw materials, coupled with the fall in power generation, led to a slackening of industrial production.

Large-scale deficit financing had already expanded the money supply significantly and thus strong inflationary pressures were built

[1] They have since become Acts.

up in the economy. Then came the international payments crisis caused among others by rapid escalation of the prices of food and fertilizers and finally of crude oil. The price level in India rose sharply and shortages of essential goods enabled hoarders, black-marketeers and smugglers to thrive.

The annual rate of inflation jumped from an average of 4 per cent in 1971-72 to 9.9 per cent in 1972-73 and to 22.6 per cent in 1973-74. In 1974-75 was recorded the sharpest rate of increase (32 per cent) in prices in post-war years. In the first half of 1974 the rate of inflation was running at about 2.5 per cent per month.

Anti-Inflationary Measures

In July 1974, a series of drastic anti-inflationary measures were introduced aimed at (a) restraint in the growth of money supply through economy in Government expenditure and restrictive credit policies; (b) greater resource mobilisation through non-inflationary means to finance growth-oriented, core sector investment; (c) augmentation of the availability of essential commodities of mass consumption and (d) greater incentives for more production, higher savings and greater investment.

Several other measures were also adopted including stringent action against anti-social elements under the Essential Commodities Act, the Maintenance of Internal Security Act and the Defence of India Rules. The rate of inflation began to abate. The annual rate of inflation which had risen to 32 per cent in September 1974 declined to 7 per cent by the first week of April 1975.

During the first few weeks of 1975-76, however, the index again showed a rising tendency as a result of the revival of speculative forces following the release of smugglers under court decisions. Therefore, as already stated, the control of inflation was given top priority in the Prime Minister's 20-Point Economic Programme. The programme also envisaged relief to the consumers through a reduction of income tax and strengthening of the public distribution system, and special provision for supply of essential commodities to the weaker sections.

Zero Rate of Inflation

The combined effect of these measures was a further decline in prices. The period from mid-May to mid-September is the lean season for agriculture, and there would normally have been, in the subsequent two or three months, a seasonal rise in prices, but as a result of the new measures, even the normal seasonal pressures were held down. The index of wholesale prices during this period hovered around 312, reflecting a fair degree of stability. By mid-December 1975 the general index was 7.0 per cent lower than a year ago.

India thus became one of the few countries in the world to arrest the forces of inflation, and what is more, to achieve a minus rate of inflation.

Increased Production

The Prime Minister's New Economic Programme accorded high priority to increasing production both in agriculture and industry. Agricultural production, it might be recalled, had gone up at an average rate of more than 4 per cent in the four years up to 1970-71. Afterwards it was subject to large fluctuations, declining during 1971 to 1973, recovering in 1973-74 but again stagnating in the following year. This was due, apart from the unfavourable weather conditions, to the slow growth of irrigation, shortages and high prices of fertilizers and insufficient supply of quality seeds, credit and electricity.

Under the 20-Point Programme, the outlay on medium and major

irrigation schemes was stepped up. Emphasis was laid not only on developing irrigation facilities at a faster rate but maximum utilisation of the existing potential, easier availability of fertilizers at reduced prices and provision of credit in greater measure. A comprehensive seed development and production programme is being taken up with assistance from the World Bank. Fertilizer prices were reduced first on 18 July and again on 1 December 1975. The states were provided with an increased outlay of Rs 480 crores to meet the resources gap for irrigation projects, a step up of Rs 123 crores over 1974-75.

The outlook for the economy changed for the better as a result of the combined impact of these measures and the favourable turn in the weather. A significant expansion of national output is now likely. With the substantial increase in *kharif* production in 1975-76, the total foodgrains production in the year, as a whole, may be fairly close to the target of 114 million tonnes. Equally good are the prospects for commercial crops, except jute and mesta.

Overall agricultural output may show an increase of more than 7 per cent as against the marginal decline in the previous year.

Higher Plan Outlay

The Annual Plan outlay for 1975-76 was increased by 23 per cent over the previous year. The Centre mobilised additional resources of the order of Rs 690 cores and the states Rs 358 crores. Apart from agriculture and irrigation priority was given to power, fertilizers, coal, petroleum, cement and transport.

The outlay on power was stepped up by 44 per cent and industry by 50 per cent. Power generating capacity is expected to go up by 10 per cent or 2.6 million kw. Project reports to set up four super thermal stations in the vicinity of coalfields were expeditiously completed under the New Economic Programme. Within four months of the programme being announced, the shortfall in power availability was brought down from 15-20 per cent to a bare 2 per cent.

Measures were also taken to stimulate industrial growth in the private sector. Several priority industries were permitted to expand their capacity up to 25 per cent. Fifteen engineering industries, important from the export point of view, were authorised to expand their capacity by 5 per cent per year over the permissible limit. Licensing provisions for medium and small industries were liberalised and 21 industries were freed from these provisions, provided they did not use imported raw materials, capital goods or foreign collaboration.

The rate of growth of industrial production is thus expected to improve significantly in 1975-76, against the estimated 3 per cent in the preceding year.

Spurt in Industrial Output

During July-September 1975, selected industries had already recorded substantial improvement in output. A 20 per cent increase was achieved in the production of vanaspati, aluminium, copper, nitrogenous fertilizers, scooters and diesel engines for vehicles. Output of coal, saleable steel, cement and petroleum refinery products was up by 10 to 20 per cent.

Production in public sector enterprises recorded an increase of 19 per cent in the first six months of 1975-76 over the same period last year.

In vital sectors of industry like coal and steel, the production level reached an all time high. Coal output which was 78 million tonnes in 1973-74 and 88 million tonnes in the last financial year, set up a

half-yearly record of 53.4 million tonnes in the first six months of 1975-76.

Steel plants in the public sector, no longer hampered by industrial disputes, produced 3.62 million tonnes in the first 8 months of 1975-76, as against 3.12 millon tonnes in the corresponding period of the preceding year. This was a growth rate of 16 per cent. The Plate Mill of Rourkela achieved in November an output 10 per cent higher than its rated capacity. During the same month, Durgapur improved its production by 41.5 per cent over the same month in previous year.

Public Distribution of Essentials

The public distribution system was strengthened to enable it to fulfil its role as an instrument of price stability and social justice and for protecting the weaker sections of society. Supplies were assured to the consumers through a network of ration shops and fair price shops, consumer co-operative stores and super bazars. These outlets handle foodgrains, sugar, controlled cloth and other articles of daily use. A full-fledged Departmtent of Civil Supplies was set up at the Centre to keep constant vigil on essential supplies and their prices. The sole agency system in certain items was abolished to reduce distribution costs and the trade was required to display prices and stocks.

Cloth for the Millions

The scheme for the production and distribution of cloth, which is one of the basic requirements of the people, was strengthened and a few more varieties were added to the range of cloth available at fixed prices. The output of *dhotis* and *saris* was increased from 100 million square metres in 1974 to 160 million square metres to meet the demand from the weaker sections. Arrangements were made to distribute controlled cloth at fixed prices through co-operatives. Ninety per cent of the cloth was distributed by 28,000 retail outlets, three-fourths of which were located in rural areas.

Land Reforms

An important item in the New Economic Programme was expeditious implementation of land reforms since enforcement of land ceilings and distribution of surplus land to the landless had been rather slow so far. As a first step, the completion of land records was expedited. A number of landowners volunteered to give information about their holdings and by December nearly 11 lakh returns had been filed in 13 States. Several states acquired surplus land and the distribution was accelerated. Simultaneously, a frontal attack was made on the centuries old problem of rural indebtedness.

The states declared a moratorium on rural debts. The indebtedness of the very poor like landless labourers was to be completely liquidated and the debts of others were to be scaled down. To fill the gap in the availability of credit to the small and marginal farmers, rural banks were started. Five of these began functioning on Gandhi Jayanti, 2 October 1975.

Abolition of Bonded Labour

The primitive institution of bonded labour, prevalent still in many parts of the country despite the Constitutional provisions to the contrary, was abolished. The Centre issued an ordinance on 24 October 1975, while several states passed legislation to achieve this purpose. Action was also initiated to revise the minimum wages of farm workers and make them commensurate with the cost of living. House sites were given to the landless and other weaker sections in the rural areas. As the programme was stepped up in a big way the figure of house sites provided reached 6 millions. Panchayats and local authorities were

placed under an obligation to provide house sites on community lands. The state governments were also making sites available from land already at their disposal or rendered surplus by enforcing ceiling laws.

Workers' Participation

A scheme of workers' participation in management to give labour a voice in the management was introduced. The states were asked to set up shop floor level councils and joint councils at the enterprise level consisting of representatives of employers and employees. A new spirit of harmony pervaded industrial relations and an effective bipartite machinery was established for a number of major industries.

Bonus

The industrial relations had been often strained before the Emergency on account of protracted dispute over the issue of bonus. An ordinance was, therefore, promulgated to define the concept of bonus and to relate it to production and productivity or profits. The minimum bonus was retained at 4 per cent as provided in the Payment of Bonus Act, 1965 and the absolute minimum payable to a worker was raised from Rs 40 to Rs 100 and Rs 25 to Rs 60. But bonus would now be payable only if the industry or establishment has a surplus over a cycle of four years. The action had become necessary also in the interest of curbing inflation and checking the price rise, which would necessarily benefit the workers. At the same time, Government made it clear that legislation would be introduced to prevent unjustified lay-offs, retrenchment and closures.

Apprenticeship Scheme

The Apprenticeship Scheme was expanded to increase employment opportunities for the educated youth. Thanks to a special drive, 96 per cent of the vacancies for trade apprentices were filled by the third week of December; 1.17 lakh vacancies being taken up out of 1,20,154 that were located. Reservations were provided for the scheduled castes and scheduled tribes and state authorities were asked to ensure that there was no prejudice against recruitment of apprentices from the minorities.

Drive Against Economic Offences

Action against smugglers, foreign exchange racketeers, hoarders, tax-evaders and black-marketeers was stepped up and loopholes in the law were plugged. Notorious smugglers were effectively put out of action and the brains behind them were rendered inoperative. Orders were issued to detain smugglers. Over 2,700 persons were arrested. A large number of raids were carried out in different parts of the country to unearth hidden wealth and as many as 662 seizures were made involving property worth over Rs 41 crores.

In order to give a chance to tax-evaders to clear themselves, Government announced a scheme on 8 October under which voluntary disclosure of black money without incurring penalty was allowed till 31 December 1975. The disclosures under this scheme exceeded Rs 1,578 crores of hidden wealth and income. The scheme thus achieved remarkable success in unearthing a substantial amount of black money and ploughing it into productive channels.

National Permit Scheme

In view of the vital importance of road transport, a scheme for issuing national permits for goods carriers was included in the 20-Point Economic Programme. The scheme envisages free flow of goods traffic across states' boundaries throughout the country, thus removing an important constraint on goods movement by road. On 26 September, an ordinance was promulgated to provide for grant of national

permits under the Motor Vehicles Act, 1939. The scheme was enforced on 2 October and the total number of national permits to be issued initially was placed at 5,300.

Exports and Foreign Exchange

A package of export promotion measures was introduced to boost exports affected by the recessionary conditions in world markets. About 190 export commodities were delicensed and the export duty on certain items was abolished. Export credit was liberalised, disbursement procedures for cash assistance were simplified and such support was extended to several non-traditional and traditional exports. These measures are expected to contribute to a higher rate of growth in exports.

The foreign exchange reserves showed a substantial increase partly due to drawals on IMF of the order of Rs 292 crores and partly due to higher private remittances from abroad following curbing of smuggling activities and drive against black money. Non-residents of Indian nationality or origin can now maintain accounts with banks in India in foreign currency. Provisions for repatriation of investment by such persons have been liberalised.

The rupee was delinked from the pound sterling and instead pegged to a basket of selected currencies. The exchange rate is now determined with reference to the daily movements of the exchange value of the currencies but the pound sterling will continue as the currency of intervention.

Need for Hard Work

The nation's success in achieving stability in the price level, in increasing agricultural and industrial production and in facing the problems of external payments is a matter of satisfaction and justifiable pride. The fact that these achievements have taken place in an atmosphere of harmonious industrial relations and a new emphasis on discipline in the context of the Emergency augurs well for a faster growth of the economy. There is, however, no room for complacency and there are no shortcuts to prosperity. As the Prime Minister has emphasised, sustained hard work is the only guarantee for achieving accelerated growth with social justice.

I THE LAND AND THE PEOPLE

India is the second most populous and the seventh largest country in the world. Its population in mid-1975 was estimated at 59.79 crores. It has an area of 32,87,782[1] sq. km. Among its states, Uttar Pradesh has the largest population—9.48 crores—and Madhya Pradesh the largest area—4,42,841 sq. km.

Lying entirely in the northern hemisphere, the Mainland extends between latitudes 8°4′ and 37°6′ north and longitudes 68°7′ and 97°25′ east and measures about 3,214 km from north to south between the extreme latitudes and about 2,933 km from east to west between the extreme longitudes. It has a land frontier of 15,200 km and a coast line of about 6,100 km.

THE PHYSICAL BACKGROUND

The Himalayas and other lofty mountains—Muztagh Ata, Aghil and Kunlun mountains to the north of Kashmir and Zaskar mountains to the east of Himachal Pradesh and north of Uttar Pradesh—form India's northern boundary, except in the Nepal region. She is adjoined in the north by China, Nepal and Bhutan. A series of mountain ranges in the east separate India from Burma. Also in the east, lies Bangladesh bounded by the Indian states of West Bengal, Assam, Meghalaya, Tripura and Mizoram. In the north-west, Afghanistan and Pakistan border on India. South of the Tropic of Cancer, the country tapers off into the Indian Ocean between the Arabian Sea on the west and the Bay of Bengal on the east. The Gulf of Manaar and the Palk Strait separate India from Sri Lanka. The Andaman and Nicobar Islands in the Bay of Bengal and Lakshadweep in the Arabian Sea are parts of the territory of India.

Physical Features

The Mainland comprises four well-defined regions, namely, the great mountain zone, the Indo-Gangetic Plains, the desert region and the Southern Peninsula.

The Himalayas comprise three almost parallel ranges interspersed with large plateaus and valleys some of which, like the Kashmir and Kulu Valleys, are fertile, extensive and of great scenic beauty. Some of the highest peaks in the world are found in these ranges. The high altitudes limit travel only to a few passes, notably the Jelep La and Natu La on the main Indo-Tibet trade route through the Chumbi Valley north-east of Darjeeling and Shipki La in Sutlej Valley north-east of Kalpa (Kinnaur). The mountain wall extends over a distance of about 2,400 km with a varying depth of 240 to 320 km. In the east, between India and Burma and India and Bangladesh, the hill ranges are much lower. The Garo, Khasi, Jaintia and Naga hills running almost east-west join the chain of the Lushai and Arakan hills running north-south.

The Indo-Gangetic Plains, about 2,400 km long and 240 to 320 km broad, are formed by the basins of three distinct river systems, the Indus, the Ganga and the Brahmaputra. They are one of the world's greatest stretches of flat alluvium and also one of the most densely

[1] Provisional, as on 1 July 1971.

populated areas on earth. There is hardly any variation in relief. Between the Yamuna river at Delhi and the Bay of Bengal, nearly 1,600 km away, there is a drop of only 200 metres in elevation.

The desert region can be divided into two parts—the 'great desert' and the 'little desert'. The 'great desert' extends from the edge of the Rann of Kutch beyond the Luni river northward. The whole of Rajasthan-Sind frontier runs through this. The 'little desert' extends from the Luni river between Jaisalmer and Jodhpur up to the northern wastes. Between the great and little deserts lies a zone of less absolutely sterile country, consisting of rocky land cut up by limestone ridges. Due to absence of surface water and very scanty rainfall, the region is almost absolutely sterile.

The Peninsular plateau is marked off from the Indo-Gangetic Plains by a mass of mountain and hill ranges varying from 460 to 1,220 metres in height. Prominent among these are the Aravalli, Vindhya, Satpura, Maikala and Ajanta. The Peninsula is flanked on one side by the Eastern Ghats, where the average elevation is about 610 metres, and on the other by the Western Ghats, where it is generally from 915 to 1,220 metres, rising in places to over 2,440 metres. Between the Western Ghats and the Arabian Sea lies a narrow coastal strip, while between the Eastern Ghats and the Bay of Bengal there is a broader coastal area. The southern point of the plateau is formed by the Nilgiri Hills where the Eastern and Western Ghats meet. The Cardamom Hills lying beyond may be regarded as a continuation of the Western Ghats.

Geological Structure

The geological regions broadly follow the physical features and may be grouped into three well-defined regions: the Himalayas and their associated group of mountains, the Indo-Gangetic Plains and the ancient block of the Peninsula.

The Himalayan mountain belt to the north and the Naga-Lushai mountains in the east are regions of mountain building movement. Much of the area, now presenting some of the most magnificent mountain scenery in the world, was under marine conditions over a period of about 60 crore years. In a series of mountain building movements commencing about seven crore years ago, the sediments and the basements of rocks in various configurations rose to great heights. The elements worked on these to produce the relief seen today.

The Indo-Gangetic Plains are a great alluvial tract that separate the Himalayas from the Peninsula to the south. The deposits of the tract belong to the latest chapter of the earth's history and conceal beneath them the southern fringes of the Himalayan formations and the northern fringes of the Peninsular formations. The thickness of the sedimentary cover in this tract exceeds 6,000 metres at places.

The Peninsula is a region of relative stability and rare seismic disturbances. Highly metamorphosed rocks of the earliest periods occur over more than half of its area, the rest being covered by the coal bearing Gondwana formations, and later sediments and lava flows belonging to the Deccan Trap formation.

River Systems

The rivers in India may be classified as: (i) Himalayan rivers, (ii) Deccan rivers, (iii) coastal rivers, and (iv) rivers of the inland drainage basin.

The Himalayan rivers are generally snow-fed and have, therefore, continuous flow throughout the year. During the monsoon months, the Himalayas receive very heavy rainfall and the rivers discharge

the maximum amount of water causing frequent floods. The Deccan rivers are generally rain-fed and, therefore, fluctuate in volume. A large number of streams are non-perennial. The coastal streams, specially of the west coast, are short in length and have limited catchment areas. Most of them are non-perennial. The streams of the inland drainage basin of western Rajasthan are few and far between. Most of them are of an ephemeral character. They drain towards the individual basins or salt lakes like the Sambhar or are lost in the sands, having no outlet to the sea. The Luni is the only river of this category that drains into the Rann of Kutch.

The Ganga basin is the largest in India receiving waters from an area which comprises about one-quarter of the total area of the country. Its boundaries are well defined by the Himalayas in the north and the Vindhya mountains in the south. The Ganga has two main headwaters in the Himalayas: the Bhagirathi and the Alaknanda, the former rising from the Gangotri glacier at Gaumukh and the latter from a glacial snout of the Alakapuri glacier. The Ganga is joined by a number of Himalayan rivers including the Yamuna, Ghaghra, Gandak and Kosi. The westernmost river of the Ganga system is the Yamuna, which rises in the Yamnotri glacier and joins the Ganga at Allahabad. Among the rivers flowing north from central India into the Yamuna or the Ganga, are the Chambal, Betwa and Son.

The second largest river basin in India is that of the Godavari. It covers an area which comprises about 10 per cent of the total area of India. The Krishna basin is the second largest in Peninsular India. The Mahanadi flows through the third largest basin in the peninsula. The basins of the Narmada in the uplands of the Deccan and of the Cauvery in the far south are of about the same size, though of different character and shape.

Two other river systems, which are small but agriculturally important, are those of the Tapi in the north and the Penner in the south.

Climate

The climate of India may be broadly described as tropical monsoon type. There are four seasons in India: (i) winter season (December-February); (ii) hot weather season, summer, (March-May); (iii) rainy season, south-west monsoon period, (June-September); and (iv) post-monsoon period, known as north-east monsoon period in the south peninsula, (October-November).

In India, rainfall is erratic and ill-distributed. It varies from place to place and year to year. However, there are four broad climatic regions based on rainfall. Practically the whole of Assam and its neighbourhood, the Western Ghats and the adjoining coastal strip and parts of the Himalayas are areas of very heavy rainfall with more than 2,000 mm of annual rainfall. Some places in the Khasi and Jaintia hills of Meghalaya receive the heaviest rainfall in the world. Cherrapunji gets 11,419 mm of annual rainfall, the highest in the country. In contrast, Rajasthan, Kutch and the high Ladakh plateau of Kashmir extending westward to Gilgit are regions of low precipitation. They get rainfall between 100 and 500 mm in a year. Between these areas at the extreme ends of the rainfall range, are two areas of moderately high and low rainfall ranging from 1,000 to 2,000 mm and 500 to 1,000 mm. The former consists of a broad belt in the eastern part of the peninsula merging northward with the north India plains. The latter runs from the Punjab plains across the Vindhya mountains into the western part of the Deccan, extending further east in Karnataka and Andhra Pradesh.

While the rainy season in most parts of the country is from June to September, in Tamil Nadu it is during October-November.

Fauna

Possessing a tremendous diversity of climate and physical conditions, India has a great variety of fauna. There are about 500 species of mammals and 2,100 species of birds in the country. There also exist more than 30,000 different species of insects, apart from a great variety of fishes and reptiles.

The mammals include elephant, associated in India from time immemorial with mythology and the splendour of her regal pageantry, the gaur or Indian bison (the wild buffalo) and the great Indian rhinoceros, now confined to Assam and West Bengal. There are also several deer species like the rare Kashmir stag, swamp deer, the beautiful spotted deer, the unique musk deer, the brow-antlered deer (Thamin) now found in Manipur only, the tiny mouse deer, the Nilgai, the Chousingha (the four-horned antelope), the only four-horned creature in the world, and the Indian antelope or black buck.

Among the animals of prey are the Indian lion, the only lion to be found in the world outside Africa. The tiger, which is the national animal, numbers less than 2,000. The alarming decline in its number in recent years has led to the launching of 'Project Tiger', a scheme financed by the Government of India to safeguard the tiger, its prey and its habitat, in nine selected areas. Among other cats are the leopard, the clouded leopard, the snow-leopard and various species of smaller cats.

Several species of monkeys and langurs are common. The only ape found in India, the hoolock, is confined to the rain forests of the eastern region. The lion tailed macaque with a halo hair around the face is found in the south.

Bird life in India is very rich and colourful. The peacock is the national bird. Several other birds like the pheasants, geese, ducks, mynahs, parakeets, pigeons, cranes, hornbills and sun birds inhabit the forests and wet lands.

The rivers and lakes harbour crocodiles and gharials, the latter being the only representative of a crocodilian order in the world.

The great Himalayan range has a very interesting fauna and include wild sheep and goats, the markhor, the ibex, the serow and the takin. The lesser panda and the snow-leopard are also to be found in the upper reaches of the mountain.

The Wild life (Protection) Act, 1972, adopted by most of the states, governs the wild life conservation and protection of endangered species both inside and outside forest areas. Under this Act, trade in rare and endangered species has been banned and further restrictions have been imposed on the export of a number of animals and birds and their products.

There are at present seven national parks, 135 wild life sanctuaries and 24 zoological gardens in the country. State governments are given financial aid for improvement and development of national parks and sanctuaries.

Flora

With its wide range of climatic conditions—from the torrid to the arctic—India has a rich and varied vegetation, which few other countries of comparable size possess. India can be divided into eight distinct floristic regions, namely, Western Himalayas, Eastern Himalayas, Assam, Indus Plain, Ganga Plain, Deccan, Malabar and Andamans.

The Western Himalayan region extends from Kashmir to Kumaon. The temperate zone of the region is rich in forests of chirpine, other conifers and broad-leaved temperate trees. Higher up, forests of deodar, blue pine, spruce and silver fir occur. The alpine zone extends from the upper limit of the temperate zone to about 4,750 metres or even higher. The characteristic trees of this zone are the high level silver fir, silver-birch and junipers.

The Eastern Himalayan region extends from Sikkim eastwards and embraces Darjeeling, Kurseong and the adjacent tract. The temperate zone of the region has forests of oaks, laurels, maples, rhododendrons, alder and birch; many conifers, junipers and dwarf willows also occur.

The Assam region comprises the Brahmaputra and Surma valleys and the intervening hill ranges. The vegetation is luxuriant with evergreen forests, occasional thick clumps of bamboos and tall grasses.

The Indus Plain region comprises the plains of Punjab, western Rajasthan and northern Gujarat. This region is dry and hot and supports scanty natural vegetation.

The Ganga Plain region covers the area from Aravalli ranges to Bengal and Orissa. A greater part of the area is alluvial plain and is under cultivation for wheat, sugarcane and rice. Only small areas support forests of widely differing types.

The Deccan region comprises the entire tableland of the Indian peninsula, and supports vegetation of various kinds from scrub jungles to mixed deciduous forests.

The Malabar region covers the excessively humid belt of mountain country running parallel to the west coast of the peninsula. This region, besides being rich in forest vegetation, produces important commercial crops such as coconut, betelnut, pepper, coffee and tea. Also, rubber, cashewnut and eucalyptus have been successfully introduced in some parts of this region.

The Andaman region comprises the Andaman and Nicobar group of islands. It abounds in evergreen, semi-evergreen, mangrove, beach and diluvial forests.

The Himalayas, Assam and the Western Ghats are rich in endemic flora, *i.e.*, plants found only in these regions of India and nowhere else in the world.

Because of the destruction of forests for agricultural, industrial and urban development, several Indian plants are facing extinction. Samples of some of these rare plants are being preserved in botanical gardens and national parks. Collections of dried samples of these plants are preserved in the Central National Herbarium, Calcutta, the regional herbaria of the Botanical Survey of India and in other research and teaching institutions of the country.

THE DEMOGRAPHIC BACKGROUND

Census

The first all-India census, though not synchronously taken, was completed in 1872. Since 1881, census in India has been taken regularly every ten years. The latest in 1971 marked the completion of 100 years of decennial census-taking in the country. The enumeration was conducted between 10 March and 3 April 1971 (with reference date as the sunrise of 1 April) except in certain areas where it was taken between September 1970 and February 1971. The highlights of the 1971 census are given at the end of this chapter.

Total Population

According to the 1971 census, the total population of India was

TABLE 1.1

GROWTH OF POPULATION (1901-1971)

State/Union Territory	1901	1911	1921	1931	1941	1951	1961	1971
INDIA	**23,83,96,327**	**25,20,93,390**	**25,13,21,213**	**27,89,77,238**	**31,86,60,580**	**36,10,88,090**	**43,92,34,771**	**54,81,59,652**
States								
Andhra Pradesh	1,90,65,921	2,14,47,412	2,14,20,448	2,42,03,573	2,72,89,340	3,11,15,259	3,59,83,447	4,35,02,708
Assam	32,89,680	38,48,617	46,36,980	55,60,371	66,94,790	80,28,856	1,08,37,329	1,46,25,152
Bihar	2,73,11,865	2,83,14,281	2,81,26,675	3,13,47,108	3,51,70,840	3,87,82,271	4,64,47,457	5,63,53,369
Gujarat	90,94,748	98,03,587	1,01,74,989	1,14,89,828	1,37,01,551	1,62,62,657	2,06,33,350	2,66,97,475
Haryana	46,23,079	41,74,690	42,55,905	45,59,931	52,72,845	56,73,614	75,90,543	1,00,36,808
Himachal Pradesh	19,20,294	18,96,944	19,28,206	20,29,113	22,63,245	23,85,981	28,12,463	34,60,434
Jammu & Kashmir[1]	21,39,362	22,92,535	24,24,359	26,70,208	29,46,728	32,53,852	35,60,976	46,16,632
Karnataka	1,30,54,754	1,35,25,251	1,33,77,599	1,46,32,992	1,62,55,368	1,94,01,956	2,35,86,772	2,92,99,014
Kerala	63,96,262	71,47,673	78,02,127	95,07,050	1,10,31,541	1,35,49,118	1,69,03,715	2,13,47,375
Madhya Pradesh	1,68,60,768	1,94,40,965	1,91,71,750	2,13,55,657	2,39,90,608	2,60,71,637	3,23,72,408	4,16,54,119
Maharashtra	1,93,91,643	2,14,74,523	2,08,49,666	2,39,59,300	2,68,32,758	3,20,02,564	3,95,53,718	5,04,12,235
Manipur	2,84,465	3,46,222	3,84,016	4,45,606	5,12,069	5,77,635	7,80.037	10,72,753
Meghalaya	3,40,524	3,94,005	4,22,403	4,80,837	5,55,820	6,05,674	7,69,380	10,11,699
Nagaland	1,01,550	1,49,038	1,58,801	1,78,844	1,89,641	2,12,975	3,69,200	5,16,449
Orissa	1,03,02,917	1,13,78,875	1,11,58,586	1,24,91,056	1,37,67,988	1,46,45,946	1,75,48,846	2,19,44,615
Punjab	75,44,790	67,31,510	71,52,811	80,12,325	96,00,236	91,60,500	1,11,35,069	1,35,51,060
Rajasthan	1,02,94,090	1,09,83,509	1,02,92,648	1,17,47,974	1,38,63,859	1,59,70,774	2,01,55,602	2,57,65,806
Sikkim	59,014	87,920	81,721	1,09,808	1,21,520	1,37,725	1,62,189	2,09,843
Tamil Nadu	1,92,52,630	2,09,02,616	2,16,28,518	2,34,72,099	2,62,67,507	3,01,19,047	3,36,86,953	4,11,99,168
Tripura	1,73,325	2,29,613	3,04,437	3,82,450	5,13,010	6,39,029	11,42,005	15,56,342
Uttar Pradesh	4,86,27,655	4,81,54,908	4,66,72,398	4,97,79,538	5,65,35,154	6,32,19,655	7,37,54,554	8,83,41,144
West Bengal	1,69,40,088	1,79,98,769	1,74,74,348	1,88,97,036	2,32,29,552	2,62,99,980	3,49,26,279	4,43,12,011
Union Territories[2]								
Andaman & Nicobar Islands	24,649	26,459	27,086	29,463	33,768	30,971	63,548	1,15,133
Arunachal Pradesh	—	—	—	—	—	—	3,36,558	4,67,511
Chandigarh	21,967	18,437	18,133	19,783	22,574	24,261	1,19,881	2,57,251
Dadra & Nagar Haveli	24,280	29,020	31,048	38,260	40,441	41,532	57,963	74,170
Delhi	4,05,819	4,13,851	4,88,452	6,36,246	9,17,939	17,44,072	26,58,612	40,65,698
Goa, Daman & Diu	5,07,518	5,19,222	5,00,904	5,41,710	5,83,736	5,96,059	6,26,667	8,57,771
Lakshadweep	13,882	14,555	13,637	16,040	18,355	21,035	24,108	31,810
Mizoram	82,434	91,204	98,406	1,24,404	1,52,786	1,96,202	2,66,063	3,32,390
Pondicherry	2,46,354	2,57,179	2,44,156	2,58,628	2,85,011	3,17,253	3,69,079	4,71,707

[1] The population of Jammu and Kashmir for 1951 has been taken to be the arithmetic mean of 1941 and 1961 population. The population of the state for 1941 and earlier censuses has been adjusted to exclude that of areas currently under the illegal occupation of Pakistan and China. Later figures exclude the population of such areas.

[2] Population figures for Goa, Daman and Diu, and Dadra and Nagar Haveli for 1901, 1911, 1941 and 1951 have been assumed to be the same as in 1900, 1910, 1940 and 1950 respectively. Similarly, figures for Pondicherry for 1951 have been assumed to be the same as in 1948. The 1961 figures for Goa, Daman and Diu relate to the census taken by the Portuguese authorities with reference date as 15 December 1960; figures for Dadra and Nagar Haveli relate to 1962 census with reference date as 1 March 1962.

54,81,59,652. As compared to the 1961 census, it showed an increase of 24.8 per cent. The main cause of this increase in population is the fall in death rate brought about by better health conditions, effective control of epidemics, efficient handling of famine conditions and general improvement and economic development. The population has gone up despite a small fall in the birth rate.

Table 1.1 shows population growth since 1901.

Mid-1975 Population

The estimated mid-1975 population of India and of the various states, as on 1 July 1975, was as follows (figure in crores): India (excluding Sikkim) 59.79, Andhra Pradesh 4.71, Assam 1.69, Bihar 6.08, Gujarat 2.96, Haryana 1.10, Himachal Pradesh 0.36, Jammu and Kashmir 0.50, Karnataka 3.18, Kerala 2.35, Madhya Pradesh 4.61, Maharashtra 5.52, Manipur 0.12, Meghalaya 0.11, Nagaland 0.05, Orissa 2.39, Punjab 1.47, Rajasthan 2.84, Sikkim (not available), Tamil Nadu, 4.47, Tripura 0.17, Uttar Pradesh 9.48, West Bengal 4.87, Andaman and Nicobar Islands 0.01, Arunachal Pradesh 0.05, Chandigarh 0.03, Dadra and Nagar Haveli 0.008, Delhi 0.49, Goa, Daman and Diu 0.09, Lakshadweep 0.003, Mizoram (shown under Assam) and Pondicherry 0.05.

TABLE 1.2
AREA AND DENSITY OF POPULATION

State/Union Territory	Area (sq. km)[1]	Population 1971	Density of population per sq. km
INDIA	**32,87,782[2]**	**54,81,59,652**	**177[3]**
States			
Andhra Pradesh	2,76,814	4,35,02,708	157
Assam	78,523	1,46,25,152	186
Bihar	1,73,876	5,63,53,369	324
Gujarat	1,95,984	2,66,97,475	136
Haryana	44,222	1,00,36,808	227
Himachal Pradesh	55,673	34,60,434	62
Jammu and Kashmir	2,22,236[2]	46,16,632	N.A.
Karnataka	1,91,773	2,92,99,014	153
Kerala	38,864	2,13,47,375	549
Madhya Pradesh	4,42,841	4,16,54,119	94
Maharashtra	3,07,762	5,04,12,235	164
Manipur	22,356	10,72,753	48
Meghalaya	22,489	10,11,699	45
Nagaland	16,527	5,16,449	31
Orissa	1,55,782	2,19,44,615	141
Punjab	50,362	1,35,51,060	269
Rajasthan	3,42,214	2,57,65,806	75
Sikkim	7,299	2,09,843	29
Tamil Nadu	1,30,069	4,11,99,168	317
Tripura	10,477	15,56,342	149
Uttar Pradesh	2,94,413	8,83,41,144	300
West Bengal	87,853	4,43,12,011	504
Union Territories			
Andaman and Nicobar Islands	8,293[4]	1,15,133	14
Arunachal Pradesh	83,578	4,67,511	6
Chandigarh	114	2,57,251	2,257
Dadra and Nagar Haveli	491	74,170	151
Delhi	1,485	40,65,698	2,738
Goa, Daman and Diu	3,813	8,57,771	225
Lakshadweep	32	31,810	994
Mizoram	21,087	3,32,390	16
Pondicherry	480	4,71,707	983

[1] Provisional, as on 1 July 1971. N.A.—Not available.
[2] Includes area under illegal occupation of Pakistan and China.
[3] Density worked out after excluding population and area figures of Jammu and Kashmir.
[4] As on 1 January 1966.

Density

The average density of population per sq. km in 1971 was 177. It varied considerably from state to state, being as high as 549 in Kerala and as low as 29 in Sikkim and 6 in Arunachal Pradesh. The area and density of population in various states and union territories are shown in Table 1.2.

The density of population and the percentage increase of population between 1921 and 1971 are as follows:

TABLE 1.3
DENSITY AND INCREASE OF POPULATION

Year	Density per sq. km	Decade	Percentage increase in population
1921	81		
1931	90	1921-31	11.0
1941	103	1931-41	14.2
1951	117	1941-51	13.3
1961	142	1951-61	21.6
1971	177	1961-71	24.8

Note: Density worked out after excluding the population and area figures of Jammu and Kashmir.

Birth and Death Rates and Life Expectancy

Estimates of birth and death rates and life expectancy at decennial censuses since 1921 are given in the Table below. There has been a steady increase in life expectancy during the successive decades.

TABLE 1.4
BIRTH AND DEATH RATES AND LIFE EXPECTANCY

Decade	Per thousand		Expectation of life at birth	
	Birth rate (estimated)	Death rate (estimated)	Males	Females
1921-30	46.4	36.3	26.91	26.56
1931-40[1]	45.2	31.2	32.09	31.37
1941-50	39.9	27.4	32.45	31.66
1951-60	41.7	22.8	41.90	40.60
1961-70	41.1[2]	18.9[2]	47.10[2]	45.60[2]

[1] Unofficial estimates.
[2] Provisional, based on one per cent sample data.

Table 1.5 shows life expectancy at various stages for the three decades 1941-50, 1951-60 and 1961-70.

TABLE 1.5
EXPECTATION OF LIFE AT VARIOUS STAGES

	Expectation of life					
	1941-50		1951-60[1]		1961-70[2]	
	Males	Females	Males	Females	Males	Females
0 ..	32.5	31.7	41.9	40.6	47.1	45.6
10 ..	40.0	39.5	45.2	43.8	49.0	48.1
20 ..	33.0	32.9	37.0	35.8	40.2	39.7
30 ..	26.6	26.2	29.0	27.9	31.9	31.7
40 ..	20.5	21.1	22.1	22.4	24.7	24.7
50 ..	14.9	16.2	16.5	17.5	18.3	18.9
60 ..	10.1	11.3	11.8	13.0	13.0	13.4

[1] Census of India 1961.
[2] Provisional, based on one per cent sample data.

Age Structure

The following Table shows the percentage of different age groups to the total population according to the 1971 census.

TABLE 1.6
AGE STRUCTURE (1971)

Age group	0 to 14	15 to 19	20 to 24	25 to 29	30 to 39	40 to 49	50 to 59	60+
Percentage of the total population	42.0	8.7	7.9	7.4	12.6	9.3	6.1	6.0

TABLE 1.7

CHANGES IN SEX RATIO BETWEEN 1901 AND 1971 (STATE-WISE)

State/Union Territory	Females per 1,000 males							
	1901	1911	1921	1931	1941	1951	1961	1971
INDIA	**972**[1]	**964**	**955**	**950**[1]	**945**[1]	**946**	**941**	**930**
States								
Andhra Pradesh	985	992	993	987	980	986	981	977
Assam	919	915	896	874	875	868	869	896
Bihar	1,054	1,044	1,016	994	996	990	994	954
Gujarat	954	946	944	945	941	952	940	934
Haryana	867	835	844	844	869	871	868	867
Himachal Pradesh	884	889	890	897	890	912	938	958
Jammu & Kashmir	882	876	870	865	869	873[2]	878	878
Karnataka	983	981	969	965	960	966	959	957
Kerala	1,004	1,008	1,011	1,022	1,027	1,028	1,022	1,016
Madhya Pradesh	990	986	974	973	970	967	953	941
Maharashtra	978	966	950	947	949	941	936	930
Manipur	1,037	1,029	1,041	1,065	1,055	1,036	1,015	980
Meghalaya	1,036	1,013	1,000	971	966	949	937	942
Nagaland	973	993	992	997	1,021	999	933	871
Orissa	1,037	1,056	1,086	1,067	1,053	1,022	1,001	988
Punjab	832	780	799	815	836	844	854	865
Rajasthan	905	908	896	907	906	921	908	911
Sikkim	916	951	970	967	920	907	904	863
Tamil Nadu	1,044	1,042	1,029	1,027	1,012	1,007	992	978
Tripura	874	885	885	885	886	904	932	943
Uttar Pradesh	937	915	909	904	907	910	909	879
West Bengal	945	925	905	890	852	865	878	891
Union Territories								
Andaman & Nicobar Islands ..	318	352	303	495	574	625	617	644
Arunachal Pradesh[3] ..	—	—	—	—	—	—	894	861
Chandigarh ..	771	720	743	751	763	781	652	749
Dadra & Nagar Haveli ..	960	967	940	911	925	946	963	1,007
Delhi ..	862	793	733	722	715	768	785	801
Goa, Daman & Diu ..	1,085	1,103	1,122	1,088	1,083	1,028	1,071	989
Lakshadweep ..	1,063	987	1,027	994	1,018	1,043	1,020	978
Mizoram ..	1,113	1,120	1,109	1,102	1,069	1,041	1,009	946
Pondicherry ..	N.A.	1,058	1,053	N.A.	N.A.	1,030[4]	1,013	989

[1] Excludes Pondicherry.
[2] For calculating sex ratio, the arithmetic mean of 1941-61 sex-wise population has been taken.
[3] Censused for the first time in 1961.
[4] Based on the 1948 population assumed as 1951 population.
N.A.—Not available.

Sex Ratio

For every thousand males, India has 930 females, according to the 1971 census, the number declining from 972 in 1901 and 950 in 1931. Only Kerala among the states (1,016) and Dadra and Nagar Haveli among the union territories (1,007) have more women than men. The lowest female ratio among the states is in Sikkim (863). Among the union territories, the lowest female ratio is in Andaman and Nicobar Islands where it is 644.

Table 1.7 gives the changes in sex ratio state-wise between 1901 and 1971.

THE SOCIAL PATTERN

The break-up of the population according to age and marital status is shown in Table 1.8.

TABLE 1.8
MARITAL STATUS (1971)[1]

(*in hundreds*)

Marital status	Males	Females	Total
Never married	15,67,268	11,92,695	27,59,963
Married	11,79,059	12,05,244	23,84,303
Widowed	83,937	2,32,233	3,16,170
Divorced or separated	5,370	8,738	14,108
Unspecified status	3,732	1,222	4,954
Total population	28,39,366	26,40,132	54,79,498

[1]Estimated from 1 per cent sample data which has been adjusted pro-rata sex-wise so as to conform to actual enumerated population. Excludes Sikkim.

Religions

Table 1.9 shows the population of the major religious communities in various states and union territories.

The following Table shows the population of major religious communities along with their percentage to total population and the percentage increase during the decennium 1961-71.

TABLE 1.10
MAJOR RELIGIOUS COMMUNITIES AND THEIR PERCENTAGE

Religious community	1961[1]		1971		
	Population	Percent-age to total population	Population	Percent-age to total population	Percent-age increase 1961-71[3]
Hindus	36,65,01,267	83.50	45,34,36,630	82.72	23.69
Muslims	4,69,39,791	10.70	6,14,18,269	11.20	30.84
Christians	1,07,26,373	2.44	1,42,25,045	2.60	32.58
Sikhs	78,45,170	1.79	1,03,78,891	1.89	32.28
Buddhists	32,50,227	0.74	38,74,942	0.71	17.33
Jains	20,27,267	0.46	26,04,837	0.48	28.49
Others[2]	16,08,118	0.37	22,21,038	0.40	19.62
TOTAL	43,92,34,771	100.00	54,81,59,652	100.00	24.79

[1] 1961 figures exclude the figures for Arunachal Pradesh as the all-India census schedule was not canvassed throughout that Pradesh then.
[2] Includes figures for 'religion not stated'.
[3] Percentage increase (1961-71) of each religion has been calculated on comparative area figures of 1961-71.

Languages

The 1961 census enumerated a total of 1652 mother tongues. (for details, see 'India 1973'). Of these, 15 languages have been specified in the Eighth Schedule of the Constitution. These are: Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu and Urdu. Data

TABLE 1.9

STATE-WISE POPULATION OF MAJOR RELIGIOUS COMMUNITIES (1971)

State/Union Territory	Hindus	Muslims	Christians	Sikhs	Buddhists	Jains	Other religions and persuasions	Religion not stated
INDIA	**45,34,36,630**	**6,14,18,269**	**1,42,25,045**	**1,03,78,891**	**38,74,942**	**26,04,837**	**21,84,955**	**36,083**
States								
Andhra Pradesh	3,81,19,279	35,20,166	18,23,436	12,591	10,035	16,108	995	98
Assam	1,06,04,618	35,92,124	3,81,010	11,920	22,565	12,914	1	—
Bihar	4,70,31,801	75,94,173	6,58,717	61,520	4,806	25,185	9,76,997	170
Gujarat	2,38,35,471	22,49,055	1,09,341	18,233	5,469	4,51,578	18,781	9,547
Haryana	89,56,310	4,05,723	9,802	6,31,048	845	31,173	5	1,902
Himachal Pradesh	33,24,627	50,327	3,556	44,914	35,937	626	319	128
Jammu & Kashmir	14,04,292	30,40,129	7,182	1,05,873	57,956	1,150	8	42
Karnataka	2,53,32,388	31,13,298	6,13,026	6,830	14,139	2,18,862	380	91
Kerala	1,26,83,277	41,62,718	44,94,089	1,284	605	3,336	562	1,504
Madhya Pradesh	3,90,24,162	18,15,685	2,86,072	98,973	81,823	3,45,211	836	1,357
Maharashtra	4,13,07,287	42,33,023	7,17,174	1,01,762	32,64,223	7,03,664	80,023	5,079
Manipur	6,32,597	70,969	2,79,243	1,028	495	1,408	83,167	3,846
Meghalaya	1,87,140	26,347	4,75,267	1,262	1,878	268	3,18,168	1,369
Nagaland	59,031	2,966	3,44,798	687	179	627	1,08,159	2
Orissa	2,11,21,056	3,26,507	3,78,888	10,204	8,462	6,521	91,859	1,118
Punjab	50,87,235	1,14,447	1,62,202	81,59,972	1,374	21,383	355	4,092
Rajasthan	2,30,93,895	17,78,275	30,202	3,41,182	3,642	5,13,548	4,339	723
Sikkim	1,44,544	335	1,663	94	62,617	191	399	—
Tamil Nadu	3,66,74,150	21,03,899	23,67,749	4,355	1,148	41,097	6,080	690
Tripura	13,93,689	1,03,962	15,713	318	42,285	375	—	—
Uttar Pradesh	7,39,97,597	1,36,76,533	1,31,810	3,69,672	39,639	1,24,728	423	742
West Bengal	3,46,11,864	90,64,338	2,51,752	35,084	1,21,504	32,203	1,94,126	1,140
Union Territories								
Andaman & Nicobar Islands	70,134	11,655	30,342	865	103	14	1,264	756
Arunachal Pradesh	1,02,832	842	3,684	1,255	61,400	39	2.96,674	785
Chandigarh	1,84,395	3,720	2,504	65,472	92	1,016	47	5
Dadra & Nagar Haveli	71,075	740	1,918	3	73	303	21	37
Delhi	34,07,835	2,63,019	43,720	2,91,123	8,720	50,513	527	241
Goa, Daman & Diu	5,50,482	32,250	2,72,509	885	260	556	269	560
Lakshadweep	1,545	30,019	239	4	—	—	3	—
Mizoram	21,229	1,882	2,86,141	427	22,647	3	61	—
Pondicherry	4,00,793	29,143	41,296	51	21	237	107	59

relating to languages/dialects spoken in India on the basis of 1971 census are being compiled.

Rural and Urban Population

Of the 54.82 crore people, who constituted the 1971 population of India, 43.90 crores or about 80 per cent live in villages and 10.92 crores or 20 per cent in cities and towns. There has been, between 1921 and 1971, a steady shift towards urbanisation as shown below:

TABLE 1.11
RURAL AND URBAN POPULATION

Percentage of total population	1921	1931	1941	1951	1961	1971
Rural	88.8	88.0	86.1	82.7	82.0	80.1
Urban	11.2	12.0	13.9	17.3	18.0	19.9

Towns and Villages

According to the 1971 census, there are 5,75,936 villages and 2,643 towns/town agglomerations. Of the villages, 3,18,633 have a population of less than 500 and 6,332 a population of 5,000 and over.

Of the towns and town agglomerations, 148 have a population of over one lakh each (see map). Of these, nine have a population of more than 10 lakhs. These are: Calcutta U.A.[1] (70,31,382), Greater Bombay (59,70,575), Delhi U.A. (36,47,023), Madras (31,69,930), Hyderabad U.A. (17,96,339), Ahmadabad U.A. (17,41,522), Bangalore U.A.(16,53,779), Kanpur U.A. (12,75,242) and Poona U.A.(11,35,034). (see Tables 1.12 and 1.13).

1971 CENSUS HIGHLIGHTS

Population of India	Persons	54.8 crores
	Males	28.4 crores
	Females	26.4 crores
Life expectancy 1961-70	Males	47.1 years
	Females	45.6 years
Birth rate 1961-70		41.1 per thousand
Death rate 1961-70		18.9 ,, ,,
Decennial growth rate 1961-71	24.80 per cent	
Density of population	177 per sq. km[2]	
Sex ratio	930 females per 1,000 males	
Literacy rate (including age group 0-4)	Persons	29.45 per cent
	Males	39.45 per cent
	Females	18.69 per cent
Proportion of urban population to total population	19.92 per cent	
Percentage of workers to total population (main activity only)	Persons	32.93
	Males	52.51
	Females	11.87

[1] U.A.—Urban agglomeration.

[2] Density worked out after excluding the figures of Jammu and Kashmir as the figures for the area beyond the cease-fire line are not available.

TABLE 1·12

STATE-WISE DISTRIBUTION OF VILLAGES ACCORDING TO POPULATION (1971)

State/Union Territory	10,000 and over	5,000 to 9,999	2,000 to 4,999	1,000 to 1,999	500 to 999	Less than 500	Total
INDIA ..	**1,358**	**4,974**	**36,005**	**81,973**	**1,32,990**	**3,18,633**	**5,75,936**[1]
States							
Andhra Pradesh	80	724	4,833	6,411	5,438	9,735	27,221
Assam[2] ..	1	29	788	3,061	5,986	12,359	22,224
Bihar ..	86	675	4,337	9,313	15,232	37,923	67,566
Gujarat ..	17	248	1,968	4,395	5,242	6,405	18,275
Haryana ..	8	148	975	1,673	1,909	2,018	6,731
Himachal Pradesh	—	2	50	260	861	15,743	16,916
Jammu & Kashmir	—	9	226	764	1,556	3,948	6,503
Karnataka ..	9	252	2,014	4,556	7,082	12,913	26,826
Kerala ..	808	316	122	16	2	4	1,268
Madhya Pradesh	6	87	1,292	5,952	16,516	47,030	70,883
Maharashtra	75	492	3,102	7,439	10,529	14,141	35,778
Manipur[3] ..	—	8	79	172	237	1,450	1,949
Meghalaya ..	—	—	7	54	237	4,285	4,583
Nagaland ..	—	1	17	114	169	659	960
Orissa ..	2	22	830	3,546	8,821	33,771	46,992
Punjab ..	2	79	940	2,392	3,577	5,198	12,188
Rajasthan ..	10	165	1,524	4,008	7,817	19,781	33,305
Sikkim ..	—	—	7	63	114	31	215
Tamil Nadu ..	140	752	3,902	4,547	3,425	2,969	15,735
Tripura ..	—	3	65	222	473	3,964	4,727
Uttar Pradesh	58	515	5,400	16,081	28,295	62,212	1,12,561
West Bengal ..	52	412	3,342	6,622	9,085	18,561	38,074
Union Territories							
Andaman & Nicobar Islands	—	—	1	19	32	338	390
Arunachal Pradesh ..	—	—	10	38	107	2,818	2,973
Chandigarh	—	1	—	7	10	8	26
Dadra & Nagar Haveli ..	—	—	5	26	18	23	72
Delhi	2	6	60	79	53	43	243
Goa, Daman & Diu ..	2	23	77	85	82	140	409
Lakshadweep ..	—	2	6	1	—	1	10
Pondicherry	—	3	26	57	85	162	333

[1] Includes three villages of Manipur for which details are not available.

[2] Includes Mizo district, now constituted as union territory of Mizoram.

[3] Separate population of three villages not available.

TABLE 1.13

DISTRIBUTION OF TOWNS/TOWN AGGLOMERATIONS[1] ACCORDING TO POPULATION (1971)

State/Union Territory	1,00,000 and over	50,000 to 99,999	20,000 to 49,999	10,000 to 19,999	5,000 to 9,999	Less than 5,000	Total
INDIA	**148**	**183**	**582**	**875**	**678**	**177**	**2,643**
States							
Andhra Pradesh	13	17	59	76	38	4	207
Assam ..	1	5	9	24	22	8	69
Bihar ..	11	9	42	57	35	7	161
Gujarat ..	8	17	37	66	67	5	200
Haryana ..	2	9	14	15	20	5	65
Himachal Pradesh	—	1	1	5	7	21	35
Jammu & Kashmir	2	—	3	3	15	20	43
Karnataka ..	12	9	38	99	46	26	230
Kerala ..	5	7	40	25	9	2	88
Madhya Pradesh	11	11	41	72	90	7	232
Maharashtra	18	16	61	90	58	14	257
Manipur ..	1	—	—	—	4	3	8
Meghalaya ..	1	—	—	1	1	—	3
Nagaland ..	—	—	1	2	—	—	3
Orissa ..	5	1	19	21	30	2	78
Punjab ..	4	8	22	32	30	10	106
Rajasthan ..	7	7	31	64	38	4	151
Sikkim ..	—	—	—	2	—	5	7
Tamil Nadu ..	16	27	57	86	44	11	241
Tripura ..	1	—	—	4	1	—	6
Uttar Pradesh	22	20	67	91	80	13	293
West Bengal ..	5	18	34	39	35	3	134
Union Territories							
Andaman & Nicobar Islands	—	—	1	—	—	—	1
Arunachal Pradesh ..	—	—	—	—	1	3	4
Chandigarh	1	—	—	—	—	—	1
Dadra & Nagar Haveli ..	—	—	—	—	—	—	—
Delhi	1	—	—	—	—	—	1
Goa, Daman & Diu ..	—	1	3	1	4	4	13
Lakshadweep ..	—	—	—	—	—	—	—
Mizoram	—	—	1	—	1	—	2
Pondicherry	1	—	1	—	2	—	4

[1] In certain clusters the urban area is not limited only to the notified boundary of any one or two places but embraces satellite towns and cities and industrial towns or settlements close to this urban area, being outgrowths of such towns/cities. Such well-formed clusters are treated urban agglomerations, the determinant being a continuous urban spread including the outgrowth(s).

2 NATIONAL SYMBOLS

NATIONAL FLAG

The National Flag is a horizontal tricolour of deep saffron (*Kesari*) at the top, white in the middle and dark green at the bottom in equal proportion. The ratio of the width of the Flag to its length is two to three. In the centre of the white band is a wheel, in navy blue, which represents the *Charkha*. Its design is that of the wheel (*Chakra*) which appears on the abacus of the Sarnath Lion Capital of Asoka. Its diameter approximates to the width of the white band and it has 24 spokes.

The design of the National Flag was adopted by the Constituent Assembly of India on 22 July 1947. Its use and display are regulated by a code.

STATE EMBLEM

The State Emblem of India is an adaptation from the Sarnath Lion Capital of Asoka as preserved in the Sarnath museum. In the original there are four lions, standing back to back, mounted on an abacus with a frieze carrying sculptures in high relief of an elephant, a galloping horse, a bull and a lion separated by intervening wheels (*Chakras*) over a bell-shaped lotus. Carved out of a single block of polished sandstone, the Capital is crowned by the Wheel of the Law (*Dharma Chakra*).

In the State Emblem adopted by the Government of India on 26 January 1950, only three lions are visible, the fourth being hidden from view. The wheel appears in relief in the centre of the abacus with a bull on the right and a horse on the left and the outlines of the other wheels on the extreme right and left. The bell-shaped lotus has been omitted. The words, *Satyameva jayate*, from the *Mundaka Upanishad* meaning 'Truth alone triumphs', are inscribed below the abacus in Devanagari script.

NATIONAL ANTHEM

Rabindranath Tagore's song *Jana-gana-mana* was adopted by the Constituent Assembly as the National Anthem of India on 24 January 1950. It was first sung on 27 December 1911 at the Calcutta session of the Indian National Congress. The complete song consists of five stanzas. The first stanza constitutes the full version of the National Anthem. It reads:

Jana-gana-mana-adhinayaka jaya he
  Bharata-bhagya-vidhata.
Punjaba-Sindhu-Gujarata-Maratha-
  Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
  Uchchhala-jaladhi-taranga
Tava subha name jage,
  Tava subha asisa mage,
  Gahe tava jaya-gatha.
Jana-gana-mangala-dayaka jaya he
  Bharata-bhagya-vidhata
Jaya he, jaya he, jaya he,
  Jaya jaya jaya, jaya he.

Playing time of the full version of the National Anthem is approximately 52 seconds. A short version consisting of the first

and last lines of this stanza (playing time approximately 20 seconds) is also played on certain occasions. The following is Tagore's English rendering of the stanza:

Thou art the ruler of the minds of all people,
Dispenser of India's destiny.
Thy name rouses the hearts of the Punjab, Sind, Gujarat and Maratha,
Of the Dravida and Orissa and Bengal.
It echoes in the hills of the Vindhyas and Himalayas,
mingles in the music of the Jamuna and Ganges
and is chanted by the waves of the Indian Sea.
They pray for thy blessings and sing thy praise.
The saving of all people waits in thy hand,
Thou dispenser of India's destiny.
Victory, victory, victory to thee.

NATIONAL SONG

Bankim Chandra Chatterjee's *Vande Mataram*, which was a source of inspiration to the people in their struggle for freedom, has an equal status with *Jana-gana-mana*. The first political occasion on which it was sung was the 1896 session of the Indian National Congress. The following is the text of its first stanza:

Vande Mataram!
Sujalam, suphalam, malayaja-shitalam,
Shasyashyamalam, Mataram!
Shubhrajyotsna, pulakitayaminim,
Phullakusumita-drumadala-shobhinim,
Suhasinim sumadhura-bhashinim,
Sukhadam varadam, Mataram!

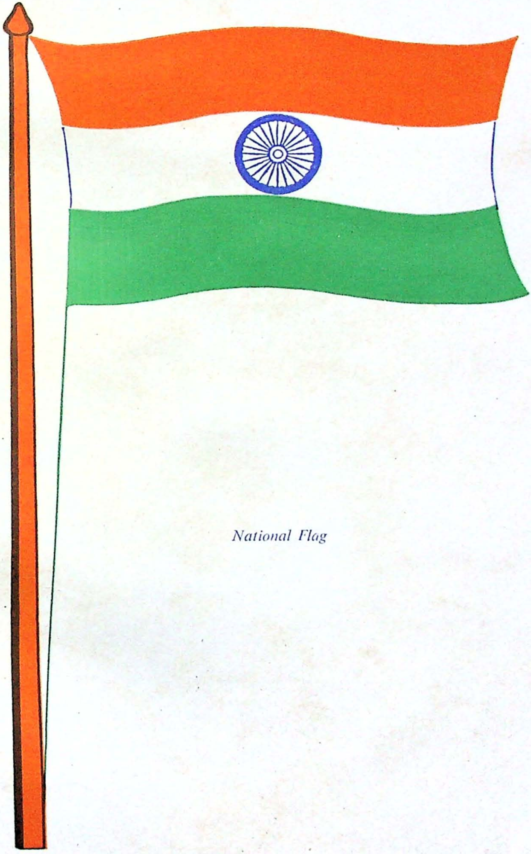
The English translation of the stanza by Sri Aurobindo is:

I bow to thee, Mother,
richly-watered, richly-fruited,
cool with the winds of the south,
dark with the crops of the harvests,
the Mother!
Her nights rejoicing in the glory of the moonlight,
her lands clothed beautifully with her trees in flowering bloom,
sweet of laughter, sweet of speech,
the Mother, giver of boons, giver of bliss!

NATIONAL CALENDAR

A uniform National Calendar based on the Saka era with Chaitra as its first month and a normal year of 365 days was adopted from 22 March 1957 along with the Gregorian calendar for the following official purposes: (i) The Gazette of India, (ii) news broadcasts by All India Radio, (iii) calendars issued by the Government of India, and (iv) government communications addressed to members of the public.

The dates of the National Calendar have a permanent correspondence with the dates of the Gregorian calendar; 1 Chaitra falling on 22 March normally and on 21 March in a leap year.



National Flag

National Emblem

3 GOVERNMENT

India, a union of states, is a Sovereign Democratic Republic with a parliamentary system of government. The Republic is governed in terms of the Constitution, which was adopted by the Constituent Assembly on 26 November 1949 and came into force on 26 January 1950.

The Constitution is federal in structure with unitary features and the President of India is the constitutional head of the executive of the union. Though the Constitution says that the executive power of the union is vested in the President, it also specifies that he shall exercise this power 'in accordance with the Constitution.' Article 74(1) of the Constitution enjoins that 'there shall be a Council of Ministers with the Prime Minister at the head to aid and advise the President in the exercise of his functions.' The real executive power thus vests in the Council of Ministers headed by the Prime Minister, collectively responsible to the Lok Sabha (House of the People). Similarly, in the states, the Governor occupies the position of the head of the executive of the state, but it is virtually the Council of Ministers with the Chief Minister at the head, collectively responsible to the Legislative Assembly of the state, which carries on the executive government.

Under the Constitution, the areas of jurisdiction of the union and states are demarcated. The constituent and residual powers of legislation are vested in Parliament of the union.

Besides, a system of local self-government is in vogue. The Directive Principle of State Policy embodied in article 40 of the Constitution says that the State shall take steps to organise village Panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government. A Panchayati Raj system has grown in almost every state whereby every village as well as groups of villages have self-governing institutions with varying powers. In the big cities there are elected municipal corporations and in medium and small towns there are elected municipal councils or committees.

The superintendence, direction and control of the preparation of the electoral rolls for, and the conduct of, all elections to Parliament and to the state legislatures and of elections to the offices of President and Vice President are vested in the Election Commission which consists of the Chief Election Commissioner and such number of other Election Commissioners as the President may fix and appoint. The Chief Election Commissioner's independence is sought to be protected by making a special constitutional provision for his removal.

The parliamentary system of government in India is based on adult suffrage, whereby all citizens of India who are not less than 21 years of age and are not disqualified on certain grounds like non-residence, unsoundness of mind or corrupt practices have the right to be registered as voters in any election to the Lok Sabha and to the legislative assemblies of the states. In 1971, the number of voters on the electoral rolls was more than 27.14 crores.

The Constitution also has provisions for the independence of the judiciary, of the Comptroller and Auditor-General of India, and the Public Service Commissions.

The judiciary has now been separated from the executive at all levels throughout the country.

THE UNION AND ITS TERRITORY

India comprises 22 states and nine union territories. The states are: Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. The union territories are: Andaman and Nicobar Islands, Arunachal Pradesh, Chandigarh, Dadra and Nagar Haveli, Delhi, Goa, Daman and Diu, Lakshadweep, Mizoram and Pondicherry.

CITIZENSHIP

The Constitution provides for a single and uniform citizenship for the whole of India. Every person who was at the commencement of the Constitution domiciled in India and (a) was born in India, or (b) either of whose parents was born in India, or (c) who had been ordinarily resident in the territory of India for not less than five years immediately preceding that date, became a citizen of India. Special provision was made for migrants from Pakistan and for persons of Indian origin resident abroad. The Citizenship Act 1955, which supplements the provisions of the Constitution, provides for the acquisition of citizenship by birth, descent, registration, naturalisation and incorporation of territory. The Act also provides for loss of citizenship by renunciation, termination and deprivation.

FUNDAMENTAL RIGHTS

The Constitution offers all citizens, individually and collectively, some basic freedoms. These are guaranteed in the Constitution in the form of seven broad categories of Fundamental Rights which are justiciable. These are: (i) the right to equality including, equality before law, prohibition of discrimination on grounds of religion, race, caste, sex, or place of birth, and equality of opportunity in matters of employment; (ii) the rights to freedom of speech and expression; assembly; association or union; movement; residence; acquisition, holding and disposal of property; and the right to practise any profession or occupation (some of these rights are subject to the security of the State, friendly relations with foreign countries, public order, decency or morality); (iii) the right against exploitation, prohibiting all forms of forced labour, child labour and traffic in human beings; (iv) the right to freedom of conscience and free profession, practice and propagation of religion; (v) the right of minorities to conserve their culture, language and script and to establish and administer educational institutions of their choice; (vi) the right to property, subject to the right of the State to compulsory acquisition for public purpose and by authority of a law which also fixes the amount to be paid or lays down the principles to determine the amount; and (vii) the right to constitutional remedies for the enforcement of Fundamental Rights.

DIRECTIVE PRINCIPLES OF STATE POLICY

The Constitution lays down certain Directive Principles of State Policy which, though not justiciable, are 'fundamental in the governance of the country,' and it is 'the duty of the State to apply these principles in making laws.' These lay down that the State shall strive 'to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political, shall inform all the institutions of national life.' The State shall direct its policy in such a manner as to secure the right of all men and women to an adequate means of livelihood, equal pay for equal work, and, within the limits of its economic capacity and development, to make effective provision for securing the right to work, education and public assistance in the event of unemployment,

old age, sickness and disablement or other cases of undeserved want. The State shall also endeavour to secure to workers a living wage, humane conditions of work, a decent standard of life and full enjoyment of leisure and social and cultural opportunities.

In the economic sphere, the State is to direct its policy in such a manner as to secure the distribution of ownership and control of the material resources of the community to subserve the common good and to ensure that the operation of the economic system does not result in the concentration of wealth and means of production to common detriment.

Some of the other important Directives relate to the provision of free and compulsory education for all children up to the age of fourteen; promotion of educational and economic interests of scheduled castes, scheduled tribes and other weaker sections; organisation of village Panchayats; separation of judiciary from the executive; promulgation of a uniform civil code for the whole country; protection of national monuments; and the promotion of international peace and security, just and honourable relations between nations, respect for international law and treaty obligations and settlement of international disputes by arbitration.

THE UNION

EXECUTIVE

The union executive consists of the President, the Vice President and the Council of Ministers under the Prime Minister.

President

The President is elected by an electoral college consisting of the elected members of both Houses of Parliament and of the legislative assemblies of the states in accordance with the system of proportional representation by means of the single transferable vote. To secure uniformity among the states *inter se* as well as parity between the states as a whole and the union, suitable weightage is given to each vote. The President must be a citizen of India, not less than 35 years of age, and eligible for election as a member of the Lok Sabha (House of the People). His term of office is five years and he is eligible for re-election. His removal from office is to be in accordance with the procedure prescribed in article 61. He may, by writing under his hand addressed to the Vice President, resign his office.

The executive power of the union is vested in the President and is exercised by him either directly or through officers of the government in accordance with the Constitution. The supreme command of the Defence Forces also vests in him. The President summons, prorogues, addresses, sends messages to Parliament and dissolves the Lok Sabha; promulgates ordinances at any time, except when both Houses of Parliament are in session; makes recommendations for introducing financial and money bills and gives assent to bills; grants pardons, reprieves, respites or remissions of punishment or suspends, remits or commutes sentences in certain cases. When there is a failure of constitutional machinery in a state, he can assume to himself all or any of the functions of the government of the state. The President can proclaim emergency in the country if he is satisfied that a grave emergency exists whereby the security of India or of any part of the territory thereof is threatened whether by war or external aggression or internal disturbance.

Vice President

The Vice President is elected by an electoral college consisting of the

members of both Houses of Parliament in accordance with the system of proportional representation by means of the single transferable vote. He must be a citizen of India, not less than 35 years of age, and eligible for election as a member of the Rajya Sabha (Council of States). His term of office is five years and he is eligible for re-election. His removal from office is to be in accordance with the procedure prescribed in article 67(b).

The Vice President is the *ex-officio* Chairman of the Rajya Sabha and acts as the President when the latter is unable to discharge his functions due to absence, illness or any other cause, or till the election of a new President (to be held within six months) when a vacancy is caused by the death, resignation or removal, or otherwise of the President. While so acting he ceases to perform the functions of the Chairman of the Rajya Sabha.

Council of Ministers

There is a Council of Ministers headed by the Prime Minister to aid and advise the President in the exercise of his functions. The Prime Minister is appointed by the President who also appoints other ministers on the advice of the Prime Minister. The Council is collectively responsible to the Lok Sabha. It is the duty of the Prime Minister to communicate to the President all decisions of the Council of Ministers relating to the administration of the affairs of the union and proposals for legislation and information relating to them and, if the President so requires, submit for the consideration of the Council any matter on which a decision has been taken by a minister but which has not been considered by the Council.

The Council of Ministers comprises ministers, who are members of the Cabinet, ministers of state and deputy ministers. For the list of personnel of the central government, see Appendices.

Administrative Set-up

Rules of Business have been framed under the Constitution for the allocation of the business of government among ministers and its more convenient transaction.

The allocation is made by the President on the advice of the Prime Minister by specifying the items of business allotted to each ministry and by assigning a ministry or a part of ministry or more than one ministry to the charge of a minister. A cabinet minister is often assisted by a minister or ministers of state or deputy ministers or both.

Generally, each ministry has an officer designated as Secretary to the Government of India to advise the minister on policy and administration.

Cabinet Secretariat

The Department of Cabinet Affairs under the Cabinet Secretariat has an important co-ordinating role in the process of decision-making at the highest level and operates under the direction of the Prime Minister. Its functions include submission of cases to the Cabinet and its committees, preparation of the records of decisions taken and follow-up action on their implementation. It also services the committees of Secretaries which meet periodically under the chairmanship of the Cabinet Secretary to consider and advise on problems requiring inter-ministerial consultation and co-ordination. It formulates the Rules of Business and allocates the business of the Government of India to the ministries and departments under the direction of the Prime Minister and with the approval of the President. The Department obtains and circulates to the President, the Vice President, the Council of Ministers and other important functionaries, periodical

summaries and notes on important developments in each ministry.

PUBLIC SERVICES

For recruitment to civil services and posts under the union government, the Constitution provides for an independent body known as the Union Public Service Commission. The chairman and members of the Commission are appointed by the President.

To ensure the independence of the Commission, the Constitution debars its chairman from further employment either under the Government of India or the government of a state. A member of of the Commission is, however, eligible for appointment as chairman of that Commission or of a state Public Service Commission, but for no other government employment.

The personnel of the Commission on 15 November 1975 was:

Chairman:	A.R. Kidwai	
Members:	R.N. Muttoo Asoka Sen Teja Singh Virk	M. Singaravelu Sarup Singh

ATTORNEY-GENERAL

The Attorney-General for India is appointed by the President to hold office during the pleasure of the President. He must be a person qualified to be appointed a judge of the Supreme Court. He gives advice to the Government of India upon such legal matters, and performs such other duties of a legal character, as may be referred or assigned to him by the President. In the performance of his duties, he has the right to audience in all courts in India as well as the right to take part in the proceedings of Parliament without the right to vote.

COMPTROLLER AND AUDITOR-GENERAL

The Comptroller and Auditor-General of India is appointed by the President. The procedure and the grounds for his removal from office are the same as for a Supreme Court judge. He is not eligible for further office under the union or a state government after he ceases to hold his office.

The Comptroller and Auditor-General prescribes, with the approval of the President, the form in which the accounts of the union and of the states are to be kept. His reports on the accounts of the union and of the states are submitted to the President and the respective Governors and are placed before Parliament and state legislatures.

His duties, powers and conditions of service have been specified by the Comptroller and Auditor-General's (Duties, Powers and Conditions of Service) Act, 1971.

OFFICIAL LANGUAGE

Hindi in Devanagari script is the official language of the union and the international form of Indian numerals is used for official purposes. It was, however, provided in the Constitution that English shall continue to be used for all official purposes of the union till 25 January 1965. But later on it was felt that a complete change-over to Hindi was not practicable within the stipulated period. Hence, the Official Languages Act, 1963, as amended, lays down that English may continue to be used, in addition to Hindi, for all official purposes of the union for which it was being used immediately before 26 January 1965 and also for the transaction of business in Parliament. Further, English shall be used for purposes of communication between the union and a state which has not adopted Hindi as its official language. Where Hindi is used for communication between a state which has adopted Hindi as its official language and another state which has not done so, such communication shall be accompanied by a translation

in English. Even a state which has not adopted Hindi as its official language may use Hindi for communication with the union or with a state which has adopted Hindi as its official language.

LEGISLATURE

The legislature of the union, which is called Parliament, consists of the President and two Houses known as the Rajya Sabha and the Lok Sabha. Each House of Parliament has to meet within six months of its previous sitting. A joint sitting of the two Houses can be held in certain cases.

Rajya Sabha

The Constitution provides that the Rajya Sabha shall consist of not more than 250 members, of whom 12 having special knowledge or practical experience in literature, science, art and social service, shall be nominated by the President and the rest shall be representatives of the states and the union territories. The elections to the Rajya Sabha are indirect; those representing the states are elected by the elected members of the legislative assemblies of the states concerned in accordance with the system of proportional representation by means of the single transferable vote and those representing the union territories are chosen in such manner as Parliament may by law prescribe. The Rajya Sabha is not subject to dissolution, one-third of its members retiring on the expiration of every second year.

The membership of the Rajya Sabha, as constituted at present, is 244. Of these, 232 represent the states and union territories, of whom 231 are indirectly elected and one, representing the union territory of Arunachal Pradesh[1] is nominated by the President. Twelve members, being specialists in the fields of literature, science, art and social service, are nominated by the President.

Lok Sabha

The Lok Sabha as constituted in March 1971 consisted of 521 members. The membership increased to 525 after the coming into force of the North-Eastern Areas (Reorganisation) Act, 1971 and with Sikkim becoming the twenty-second state of the Indian union. Of these, 507 are directly elected from 22 states and 15 from eight union territories. One member is nominated by the President to represent the union territory of Arunachal Pradesh[1] and two members are nominated by him to represent the Anglo-Indian community.

The number of seats for each state is so allocated that the ratio between the number and the population of the state is, as far as practicable, the same for all the states. Unless dissolved sooner, the term of the Lok Sabha is five years from the date appointed for its first meeting. During an emergency, Parliament may by law prolong its life for a period not exceeding one year at a time and not extending in any case beyond a period of six months after the emergency has ceased to operate.

The state-wise allocation of seats in the two Houses and the party position in the Lok Sabha is given in Table 3.1. For names of members of Parliament, see Appendices.

Qualifications for Membership of Parliament

In order to be chosen a member of Parliament, a person must be a citizen of India; must be not less than 30 years of age in the case of the Rajya Sabha and not less than 25 years of age in the case of the

[1] Under the Government of Union Territories (Amendment) Act, 1975, an indirectly elected member will hereafter represent the union territory of Arunachal Pradesh in the Rajya Sabha. Similarly the union territory will elect two members to the Lok Sabha to be constituted after the next general elections.

Lok Sabha. Additional qualifications may be prescribed by Parliament by law.

Parliamentary Privileges

The Constitution provides for freedom of speech in Parliament. No member of Parliament can be held liable to any proceedings in any court in respect of anything said or any vote given by him in Parliament or any of its committees. Other powers, privileges and immunities of the members are the same as those enjoyed by the members of the House of Commons of the British Parliament at the commencement of the Indian Constitution, until Parliament defines them by law. The validity of any proceedings in Parliament shall not be called in question on the ground of any irregularity of procedure.

Functions and Powers of Parliament

The main functions of Parliament are to make laws for the country and make finances available to the government for the services of the State. The Council of Ministers is collectively responsible to the Lok Sabha. Parliament is also vested with the powers to impeach the President and to remove judges of the Supreme Court and High Courts, the Chief Election Commissioner and the Comptroller and Auditor-General in accordance with the procedure laid down in the Constitution.

All legislation requires the consent of both Houses of Parliament. In the case of money bills, however, the will of the Lok Sabha prevails. Delegated legislation is also subject to review and control by Parliament. All financial legislation must be recommended by the President, but the Lok Sabha alone has the power to assent or refuse to assent to the demands for grants, authorise appropriations of moneys and approve the proposals for taxation. In times of an emergency, and also in some other contingencies laid down in the Constitution, the legislative authority of Parliament also extends to matters enumerated in the State List. The power to amend the Constitution also rests primarily with Parliament, except in some cases where ratification by the legislatures of not less than one-half of the states is prescribed by the Constitution.

Parliamentary Committees

To assist Parliament in its deliberations, Parliamentary committees are appointed or elected by the respective Houses themselves on a motion made, or nominated by their presiding officers. The committees broadly fall under three groups: those concerned mainly with the organisation and powers of the Houses; those assisting the Houses in their legislative functions; and committees with financial functions. In the first category fall the Committees on Rules, Privileges and Absence of Members and the Business Advisory Committee. The legislative committees include Select Committees of either House and Joint Select Committees of the two Houses, set up *ad hoc* for the consideration of important bills. The three important committees in the third category are the Public Accounts, the Estimates and the Public Undertakings Committees. While Rajya Sabha members are associated with the first and third committees, membership of the second is confined only to the Lok Sabha. Ministers are debarred from being members of these three committees.

The Public Accounts Committee scrutinises the Appropriation Accounts of the Government of India and the report of the Comptroller and Auditor-General thereon. It ensures that public money is spent in accordance with Parliament's decisions and calls attention to cases of waste, extravagance, loss, nugatory expenditure or lack of financial

TABLE 3.1

Allocation of Seats in Two Houses of Parliament and Party Position in Lok Sabha

As on 30 September 1975

	No. of seats in Rajya Sabha	LOK SABHA								
		No. of seats	Congress	Communist Party of India (Marxist)	Communist Party of India	Dravida Munnetra Kazhagam	Jana Sangh	Other Parties	Un-attached	Total
Andhra Pradesh	18	41	37	1	1	—	—	2[1]	—	41
Assam	7	14	13	1	—	—	—	—	—	14
Bihar	22	53	36	—	5	—	2	8[2]	—	51 (2 vacant)
Gujarat	11	24	12	—	—	—	—	10[3]	1	23 (1 vacant)
Haryana	5	9	7	—	—	—	1	—	1	9
Himachal Pradesh	3	4	3	—	—	—	—	—	—	3 (1 vacant)
Jammu & Kashmir	4	6	5	—	—	—	—	—	1	6
Karnataka	12	27	27	—	—	—	—	—	—	27
Kerala	9	19	6	2	3	—	—	5[4]	2	18 (1 vacant)
Madhya Pradesh	16	37	21	—	—	—	10	6[5]	—	37
Maharashtra	19	45	40	—	1	—	—	3[6]	1	45
Manipur	1	2	2	—	—	—	—	—	—	2
Meghalaya	1	2	—	—	—	—	—	—	2	2
Nagaland	1	1	—	—	—	—	—	1[7]	—	1
Orissa	10	20	14	—	1	—	—	5[8]	—	20
Punjab	7	13	8	—	1	—	—	—	1	10[10] (2 vacant)
Rajasthan	10	23	15	—	—	—	2	3[9]	3	23

Sikkim	1	1	—	—	—	—	—	—	1	1
Tamil Nadu	18	39	9	—	4	18	—	8[10]	—	39
Tripura	1	2	—	2	—	—	—	—	—	2
Uttar Pradesh	34	85	73	—	5	—	4	2[11]	1	85
West Bengal	16	40	13	20	3	—	—	1[12]	1	38 (2 vacant)
Andaman & Nicobar Islands	—	1	1	—	—	—	—	—	—	1
Chandigarh	—	1	1	—	—	—	—	—	—	1
Dadra & Nagar Haveli	—	1	1	—	—	—	—	—	—	1
Delhi	3	7	6	—	—	—	—	—	—	6 (1 vacant)
Goa, Daman & Diu	—	2	1	—	—	—	—	1[13]	—	2
Lakshadweep	—	1	1	—	—	—	—	—	—	1
Mizoram	1	1	1	—	—	—	—	—	—	1
Pondicherry	1	1	—	—	—	—	—	1[14]	—	1
Arunachal Pradesh	1[17]	1[17]	1	—	—	—	—	—	—	1
Anglo-Indian Community	—	2[17]	—	—	—	—	—	2[15]	—	2
Nominated by President under art 80(1) (a) of the Constitution	12	—	—	—	—	—	—	—	—	—
TOTAL	244	525	354	26	24	18	19	58	15	514[16]+10 vacant

[1] Telengana Praja Samiti—2.
[2] Socialist Party—2, Cong. (O)—3, UIPG—2, BLD—1.
[3] BLD—2, Cong. (O)—8.
[4] Muslim League—2, Kerala Congress—3.
[5] BLD—1, UIPG—4, Socialist Party—1.
[6] Socialist Party—1, Forward Bloc—2.
[7] UIPG—1.
[8] BLD—5.
[9] BLD—1, UIPG—2.
[10] Muslim League—1, Forward Bloc—1, Cong. (O)—1, ADMK—5.
[11] BLD—2.
[12] Socialist Party—1.
[13] UIPG—1.
[14] ADMK—1.
[15] UIPG—2.
[16] Excludes the Speaker, who is not a member of any party.
[17] Nominated by the President.

integrity in public services. The Estimates Committee reports on 'what economies, improvements in organisation, efficiency or administrative reform, consistent with the policy underlying the estimates' may be effected. It also examines whether 'the money is well laid out within the limits of the policy implied in the estimates' and suggests the form in which the estimates shall be presented to Parliament. The Committee on Public Undertakings examines the reports and accounts of certain specified public undertakings and reports of the Auditor-General thereon, if any. It also examines whether the public undertakings are being run efficiently and 'managed in accordance with sound business principles and prudent commercial practices'.

Other important committees of the Lok Sabha are the Committee on Government Assurances, the Committee on Subordinate Legislation and the Committee on Petitions. The first Committee scrutinises the assurances given by ministers on the floor of the House and reports on the extent of their implementation. The second Committee scrutinises whether the powers to make regulations, rules, sub-rules and bye-laws conferred by the Constitution or delegated by Parliament are being properly exercised within such delegation. The third Committee examines petitions or representations received from individuals or associations. Ministers are debarred from being members of these committees. A new committee, *viz.*, Committee on Papers Laid, has been constituted by the Lok Sabha on 1 June 1975 to examine the papers laid on the Table of the House in regard to delay as also to find out reasons for not laying the Hindi version of the papers on the Table.

There are also three standing Joint Committees of the two Houses. They are the Committee on Offices of Profit, the Committee on Salaries and Allowances of Members of Parliament and the Committee on the Welfare of Scheduled Castes and Scheduled Tribes. The third Committee considers the reports of the Commissioner for Scheduled Castes and Scheduled Tribes and reports to both Houses as to the measures to be taken by the union government (including the administrations of the union territories) for their welfare.

Consultative Committees

There are Consultative Committees for different ministries and departments which provide a forum for discussion between members of Parliament and the ministries. These Committees function in accordance with the guidelines evolved by the government in consultation with leaders of opposition parties and groups.

JUDICIARY

Supreme Court

The Supreme Court of India consists of a Chief Justice and not more than thirteen other judges appointed by the President. The judges hold office till the age of 65. For appointment as a judge of the Supreme Court, a person must be a citizen of India and must have been for at least five years a judge of a High Court or of two or more such courts in succession; or an advocate of a High Court or of two or more such courts in succession for at least ten years; or he must be, in the opinion of the President, a distinguished jurist. Provision exists for the appointment of a judge of a High Court as an *ad hoc* judge of the Supreme Court and for retired judges of the Supreme Court or High Courts to sit and act as judges of that Court.

The Constitution seeks to ensure the independence of the Supreme Court judges in various ways. A judge of the Supreme Court cannot be removed from office except by an order of the President passed after an address by each House of Parliament supported by a majority

of the total membership of that House and by a majority of not less than two-thirds of the members present and voting has been presented to the President in the same session for such removal on the ground of proved misbehaviour or incapacity. A person who has been a judge of the Supreme Court is debarred from practising in any court of law or before any other authority in India.

The membership of the Court as on 15 November 1975 was:

Chief Justice:	A.N. Ray	
Judges:	H.R. Khanna	P.K. Goswami
	K.K. Mathew	R.S. Sarkaria
	M.H. Beg	A.C. Gupta
	Y.V. Chandrachud	N.L. Untwalia
	P.N. Bhagwati	S. Murtza Fazal Ali
	V.R. Krishna Iyer	P.N. Singhal

Jurisdiction of Supreme Court

The Supreme Court has original and appellate jurisdiction. Its exclusive original jurisdiction extends to any dispute between the union and one or more states; or between the union and any state or states on one side and one or more other states on the other; or between two or more states, if and insofar as the dispute involves any question (whether of law or of fact) on which the existence or extent of a legal right depends. In addition, article 32 of the Constitution gives an extensive original jurisdiction to the Supreme Court in regard to the enforcement of Fundamental Rights. It is empowered to issue directions or orders or writs, including those in the nature of writs of *habeas corpus, mandamus*, prohibition, *quo warranto* and *certiorari* to enforce them.

The appellate jurisdiction of the Supreme Court can be invoked by a certificate of the High Court concerned or by special leave granted by the Supreme Court, in respect of any judgment, decree or final order of the High Court in cases, both civil and criminal, involving substantial questions of law as to the interpretation of the Constitution. Appeals also lie to the Supreme Court in civil matters if the High Court concerned certifies (a) that the case involves a substantial question of law of general importance, and (b) that in the opinion of the High Court the said question needs to be decided by the Supreme Court. In criminal cases an appeal lies to the Supreme Court, if the High Court (a) has on appeal reversed an order of acquittal of an accused person and sentenced him to death or to imprisonment for life or for a period of not less than 10 years, or (b) has withdrawn for trial before itself any case from any court subordinate to its authority and has in such trial convicted the accused person and sentenced him to death or to imprisonment for life or for a period of not less than 10 years, or (c) certifies that the case is a fit one for appeal to the Supreme Court. Parliament is authorised to confer on the Supreme Court any further powers to entertain and hear appeals from any judgment, final order or sentence in a criminal proceeding of a High Court.

The Supreme Court has also a very wide appellate jurisdiction over all courts and tribunals in India inasmuch as it may, in its discretion, grant special leave to appeal from any judgment, decree, determination, sentence or order in any case or matter passed or made by any court or tribunal in the territory of India.

It has a special advisory jurisdiction in matters which may specifically be referred to it by the President under article 143 of the Constitution.

Appeals also lie to the Supreme Court under some Parliamentary enactments.

THE STATES

The system of government in the states closely resembles that of the union.

EXECUTIVE

The state executive consists of the Governor and the Council of Ministers with the Chief Minister at its head.

Governor

The Governor of a state is appointed by the President for a term of five years and holds office during his pleasure. Only Indian citizens above 35 years of age are eligible for appointment to this office. The executive power of the state is vested in the Governor and all executive actions of the government of the state are expressed to be taken in his name.

The Governor has to act on the aid and advice of the Council of Ministers, except insofar as he is by or under the Constitution required to exercise his functions or any of them in his discretion. The discretionary powers of the Governors, specifically so stated in the Constitution, are those relating to certain matters concerning the administration of the tribal areas in Assam and Meghalaya, the Tuensang area of Nagaland, the hill areas of Manipur and the Telengana region of Andhra Pradesh and the maintenance of law and order in Nagaland. In the case of Sikkim, the Governor has special responsibility for peace and for an equitable arrangement for ensuring the social and economic advancement of different sections of the population of the state and in the discharge of his special responsibility he acts in his discretion subject to certain directions as the President from time to time, deems fit to issue. However, all Governors while discharging such constitutional functions as the appointment of the Chief Minister of a state or sending a report to the President about the failure of the constitutional machinery in a state, have to exercise their discretion in accordance with the constitutional conventions.

Council of Ministers

The Chief Minister is appointed by the Governor, who also appoints other ministers on the advice of the Chief Minister. The Council of Ministers is collectively responsible to the legislative assembly of the state.

Advocate-General

There is an Advocate-General for each state who is appointed by the Governor to hold office during the pleasure of the Governor. He must be a person qualified to be appointed a judge of a High Court. He gives advice to the state government upon such legal matters, and performs such other duties of a legal character, as may be referred or assigned to him by the Governor. The Advocate-General can take part in the proceedings of the state legislature without the right to vote.

Planning

At the state level, an inter-departmental committee of secretaries headed by the Chief Secretary or Secretary in-charge of planning, co-ordinates development programmes. Generally, the functions of co-ordination for planning and implementation of programmes in the districts are performed by an officer commonly known as Development Commissioner. As a rule, a committee of the state cabinet under the Chief Minister provides overall guidance and direction.

State planning boards which include non-officials have been set-up in most of the states.

District Administration

District Administration in the country is under a collector who is responsible for the proper collection of revenue, for the maintenance of law and order and for criminal administration in the district. The police force in each district is headed by a superintendent of police.

LEGISLATURE

For every state there is a legislature which consists of the Governor and one House or, as the case may be, two Houses. In Andhra Pradesh, Bihar, Jammu and Kashmir, Karnataka, Maharashtra, Tamil Nadu and Uttar Pradesh, there are two Houses known as the Legislative Council and the Legislative Assembly.[1] In the remaining states there is only one House known as the Legislative Assembly. Parliament can, by law, provide for the abolition of an existing legislative council or for the creation of one where one does not exist if the proposal is supported by a resolution of the legislative assembly concerned.

Legislative Council (Vidhan Parishad)

The legislative council of a state comprises not more than one-third of the total number of members in the legislative assembly of the state and in no case less than 40 members[2]. About one-third of the members of the council are elected by members of the legislative assembly from amongst persons who are not its members, one-third by electorates consisting of members of municipalities, district boards and other local authorities, one-twelfth by registered teachers in educational institutions not lower in standard than secondary schools and a further one-twelfth by registered graduates of more than three years' standing. The remaining members are nominated by the Governor from among those who have distinguished themselves in the fields of literature, science, art, co-operative movement and social service. The legislative councils are not subject to dissolution but one-third of their members retire every second year.

Legislative Assembly (Vidhan Sabha)

The legislative assembly of a state consists of not more than 500 and not less than 60 members[3] chosen by direct election from territorial constituencies in the state. The demarcation of territorial constituencies is to be done in such a manner that the ratio between the population of each constituency and the number of seats allotted to it, as far as practicable, is the same throughout the state. The term of an assembly is five years unless it is dissolved earlier.

Table 3.2 gives the strength of the legislative councils in states with bicameral legislatures and the number of seats and party position in the legislative assemblies in the states as on 1 September 1975. It also shows the position in the union territories having assemblies and in the Delhi Metropolitan Council.

Powers and Functions

The state legislature has exclusive powers over subjects enumerated in List II of the Seventh Schedule to the Constitution and concurrent powers over those enumerated in List III. The financial powers of

[1] Although the Constitution (Seventh Amendment) Act, 1956 provides for the creation of a legislative council in Madhya Pradesh, it has not yet been constituted.

[2] The legislative council of Jammu and Kashmir has 36 members vide section 50 of the Constitution of Jammu and Kashmir.

[3] The legislative assembly of Sikkim has 32 members vide article 371 F of the Constitution.

TABLE 3.2

ALLOCATION OF SEATS AND STRENGTH OF PARTIES IN STATE/UNION TERRITORY LEGISLATURES

As on 1 September 1975

State/Union Territory	No. of seats in the Legislative Council	Legislative Assembly										
		No. of seats	Cong-ress	Cong-ress(O)	BLD	CPI	CPI (M)	Socialist Party	Jana Sangh	Other Parties[4]	Indepen-dents[5]	Seats vacant
Andhra Pradesh	90	287	242	—	—	8	1	—	—	25	10	1
Assam	—	114	95	—	2	3	—	4	—	5	5	—
Bihar	96	318	193	3	—	35	—	—	1	16	20	50
Gujarat	—	182	75	56	2	—	—	2	18	13	15	1[6]
Haryana	—	81	61	2	6	—	—	—	2	3	7	—
Himachal Pradesh	—	68	54	—	—	—	1	—	5	2	6	—
Jammu & Kashmir[1]	36	75[2]	60	—	2	—	—	—	2	5	6	—[7]
Kerala	—	133	35	3	—	16	31	7	—	33	6	2
Karnataka	63	216	165	24	—	3	1	2	—	1	19	1
Madhya Pradesh	—	296	229	—	—	5	—	4	39	—	14	5
Maharashtra	78	270	233	—	—	2	1	—	4	12	16	2
Manipur	—	60	37	—	—	6	—	—	—	15	2	—
Meghalaya	—	60	12	—	—	—	—	—	—	46	2	—
Nagaland[3]	—	60	—	—	—	—	—	—	—	—	—	60
Orissa	—	147	70	1	55	7	3	2	—	—	8	1
Punjab	—	104	67	—	—	10	1	—	1	25	—	—
Rajasthan	—	184	150	—	—	5	1	2	—	16	8	2
Sikkim	—	32	—	—	—	—	—	—	—	32	—	—
Tamil Nadu	63	234	7	13	—	5	—	—	—	206	2	1
Tripura	—	60	35	—	—	1	15	—	—	—	8	1

Uttar Pradesh	108	425	228	10	91	16	2	4	58	3	11	2
West Bengal	—	280	215	3	—	36	13	—	—	8	4	1
Arunachal Pradesh	—	23	23	—	—	—	—	—	—	—	—	—
Delhi[3]	—	56	41	2	—	3	—	—	6	1	2	1
Goa, Daman & Diu	—	30	1	—	—	—	—	—	—	28	1	—
Mizoram	—	30	26	—	—	—	—	—	—	4	—	—
Pondicherry[2]	—	30	—	—	—	—	—	—	—	—	—	30
TOTAL	534	3,855	2,354	117	158	161	70	27	136	499	172	161

1 Excluding 25 seats for the territory held by Pakistan.

2 Nagaland and Pondicherry Legislative Assemblies were dissolved on 20-5-75 and 28-3-74 respectively.

3 Metropolitan Council.

4 Other Parties include:

Andhra Pradesh—Socialist Democratic Front 6, Andhra Pradesh Progressive Democrats 7, Progressive Front 6, Peoples' Democrats 3, Majlis Ittehad-ul-Muslimeen 2, Republican Party of India 1.
Assam—Peoples' Democratic Party 3, RCPI 1, Plain Tribal Conference 1.
Bihar—SSP 6, Socialist Vidhayak Dal 1, Hul Jharkand 2, Progressive Hul Jharkand 1, Jharkand (HN Horo Group) 1, All India Jharkand Party 3, Hindustani Soshit Dal 2.
Gujarat—Rashtriya Majoor Paksha 1, Kisan Mazdoor Lok Paksha 12.
Haryana—Vishal Haryana Party 3.
Himachal Pradesh—Lok Raj Party 2.
Jammu & Kashmir—Jamaat-Islami 5.
Kerala—Kerala Congress 10, Kerala congress (Original) 2, Muslim League 5, Muslim League Dissidents 6, RSP 6, Karshak Thozilali Party 2, Kerala Socialist Party 2.
Karnataka—Janathapaksh 1.
Maharashtra—Peasants and Workers' Party 8, Republican Party 1, Muslim League 1, BKD 1, Shiv Sena 1.
Manipur—Manipur Peoples' Party 8, Manipur Hills Union 6, Kuki National Assembly 1.
Meghalaya—All Party Hill Leaders' Conference 38, Hill State Peoples' Democratic Party 8.
Punjab—Shiromani Akali Dal 25.
Rajasthan—Janta Morcha 15, Swatantra 1.
Sikkim—Sikkim Congress 31, National Party 1.
Tamil Nadu—DMK 167, ADMK 16, Forward Bloc 7, Muslim League 6, Tamil Nadu Communist Party 2, Tamil Arasu Kazhagam 1, TMK 2, Swatantra 5.
Uttar Pradesh—Hindu Maha Sabha 1, Muslim League 1, Soshit Samaj Dal 1.
West Bengal—RSP 3, Socialist Unity Centre 1, Workers' Party 1, Gorkha League 2, Muslim League 1.
Delhi—Muslim League 1.
Goa, Daman & Diu—Maharshtravadi Gomantak 19, United Goans (Sequiera Group) 2, United Goans (Naik Group) 7.
Mizoram—Mizoram Union 4.

5 Independents include the speaker in the Legislative Assemblies of Karnataka, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu and West Bengal.

6 As on 14-7-75.

7 As on 7-7-75.

the legislature include authorisation of all expenditure, taxation and borrowing by the state government. The legislative assembly alone has the power to originate money bills. The legislative council can make only recommendations in respect of changes it considers necessary within a period of fourteen days of the receipt of a money bill from the assembly. The assembly can accept or reject the recommendations.

Reservation of Bills

The Governor of a state may reserve any Bill for the consideration of the President. Bills relating to subjects like compulsory acquisition of property, measures affecting the powers and the position of High Courts, and imposition of taxes on the storage, distribution and sale of water or electricity in inter-state river or river valley development projects should necessarily be so reserved. No Bill seeking to impose restrictions on inter-state trade can be introduced in a state legislature without the previous sanction of the President.

Control over Executive

The state legislatures, apart from exercising the usual power of financial control, use all the normal parliamentary devices like questions, discussions, debates, adjournment and no-confidence motions and resolutions to keep a watch over the day-to-day work of the Executive. They also have their Committees on Estimates and Public Accounts to ensure that grants sanctioned by the legislature are properly utilised.

JUDICIARY

High Courts

Every state has a High Court which stands at the head of the state's judicial administration. There are 18 High Courts in the country, including two having jurdisdiction over more than one state. Among the union territories, Delhi alone has a High Court of its own. Goa, Daman and Diu has a Judicial Commissioner while the other seven union territories come under the jurisdiction of different state High Courts. Each High Court consists of a Chief Justice and such other judges as the President may, from time to time, appoint. The Chief Justice of a High Court is appointed by the President in consultation with the Chief Justice of India and the Governor of the state. The procedure for appointing other judges is the same except that the Chief Justice of the High Court concerned is also consulted. They hold office until they attain the age of 62 and are removable in the same manner as a judge of the Supreme Court of India. To be eligible for appointment as a judge, one must have held a judicial office in India for ten years or must have practised as an advocate of a High Court or two or more such courts in succession for a similar period.

Every High Court has the power to issue to any person or authority and government within its jurisdiction directions, orders or writs (including writs which are in the nature of *habeas corpus, mandamus,* prohibition, *quo warranto* and *certiorari*, or any of them) for the enforcement of any of the Fundamental Rights and for any other purpose.

This power may also be exercised by any High Court exercising jurisdiction in relation to the territories within which the cause of action, wholly or in part, arises for the exercise of such power, notwithstanding that the seat of such government or authority or the residence of such persons is not within those territories.

The High Courts have powers of superintendence over all courts and tribunals within their jurisdiction. They can call for returns from such courts, make and issue general rules and prescribe forms to regulate their practices and proceedings and determine the manner and form in which books, entries and accounts shall be kept.

Table 3.3 gives the seat and territorial jurisdiction of the High Courts.

TABLE 3.3
JURISDICTION AND SEAT OF HIGH COURTS

No.	Name	Year of establishment	Territorial jurisdiction	Seat of the Court
1	Allahabad	1866	Uttar Pradesh	Allahabad (Bench at Lucknow)
2	Andhra Pradesh	1954	Andhra Pradesh	Hyderabed
3	Gauhati	1972	Assam ,Manipur, Meghalaya, Nagaland, Tripura, Mizoram and Arunachal Pradesh	Gauhati (temporary Benches at Imphal, Agartala and Kohima)
4	Bombay	1861	Maharashtra and Dadra & Nagar Haveli	Bombay (Bench at Nagpur)
5	Calcutta	1861	West Bengal and Andaman & Nicobar Islands	Calcutta
6	Delhi	1966	Delhi	Delhi
7	Gujarat	1960	Gujarat	Ahmadabad
8	Himachal Pradesh	1971	Himachal Pradesh	Simla
9	Jammu & Kashmir	1928	Jammu & Kashmir	Srinagar and Jammu
10	Karnataka	1884	Karnataka	Bangalore
11	Kerala	1956	Kerala and Lakshadweep	Ernakulam
12	Madhya Pradesh	1956	Madhya Pradesh	Jabalpur (Benches at Indore and Gwalior)
13	Madras	1861	Tamil Nadu and Pondicherry	Madras
14	Orissa	1948	Orissa	Cuttack
15	Patna	1916	Bihar	Patna (temporary Bench at Ranchi)
16	Punjab and Haryana	1947	Punjab, Haryana and Chandigarh	Chandigarh
17	Rajasthan	1949	Rajasthan	Jodhpur
18	Sikkim	1975	Sikkim	Gangtok

Subordinate Courts

Subject to minor variations, the structure and functions of the subordinate courts are more or less uniform throughout the country. A state is divided into a number of districts, each under the jurisdiction of a principal civil court presided over by a district judge. Sometimes he is assisted by additional district judges. Subordinate to a district judge is a hierarchy of different grades of civil courts.

Besides hearing suits, the civil courts exercise jurisdiction over several matters such as arbitration, guardianship, marriage, divorce, and probate. Quasi-judicial tribunals distinct from the ordinary courts have also been set up under certain special Acts for determining some types of civil rights. In some cases, appeals lie from their orders to the ordinary civil courts. But even when no such right is given, they are subject to the constitutional right of superintendence of High Courts.

The constitution and organisation of criminal courts and their procedure are regulated by the Code of Criminal Procedure, 1973, which came into force with effect from 1 April 1974, repealing the Code of Criminal Procedure, 1898. The Code provides separate sets of magistrates for the discharge of the executive and judicial functions. The executive magistrates are under the control of the state government while the judicial magistrates are under the control of the High Court. On the executive side, for each district there is a district

magistrate and under him a number of subordinate magistrates. These magistrates continue to deal with problems relating to the maintenance of law and order and the prevention of crime. On the judicial side, the judicial hierarchy of magistrates consists of the chief judicial magistrate at the district level and the judicial magistrates of the first class and second class. Broadly speaking, magisterial functions, which are essentially judicial in nature, are the concern of the judicial magistrates. In metropolitan areas, with a population of more than 10 lakhs, there are metropolitan magistrates who have larger powers for quicker disposal of cases.

Reform in Criminal Procedure

Radical changes in the criminal procedure have been made by the new Code of Criminal Procedure, 1973. The new Code provides for the separation of judiciary from the executive on an all-India basis and makes several important changes designed to expedite the disposal of cases, to improve efficiency, to prevent abuses and to afford relief to the poorer sections of the community.

The system of appointing honorary magistrates or justices of the peace has been done away with. Instead, a provision has been made for the appointment of retired or serving officers of government as special magistrates with summary powers to try special categories of petty cases. The jury system has also been abolished.

Under the Code, every person arrested with or without warrant shall be informed of the grounds of his arrest and in bailable cases, of his right to be released on bail. A person cannot be kept in police custody during investigation for more than 15 days, even by an order of court. No person shall be kept on remand by order of court for more than 60 days in any case, after which he will be entitled to be released on bail. Bail provisions have been liberalised. These include grant of anticipatory bail in certain cases.

Another major change is the doing away with committal proceedings in sessions cases. The powers of revision conferred on superior courts cannot be exercised in respect of interlocutory orders. The provision relating to compulsory stay of proceedings on the mere intimation by the party of his intention to move for a transfer has been omitted, but stay of proceedings can, however, be obtained from superior courts in proper cases. Provision has also been made to provide an opportunity to the accused to make his representation, if any, on the punishment proposed to be given after conviction.

The provision for demanding security from habitual offenders has been extended to anti-social offenders like smugglers, blackmarketeers and persons, who default in provident fund contribution or commit offences under the Untouchability (Offences) Act, etc.

A copy of the first information report will have to be given to the informant. If a police officer refuses to record the information, the aggrieved person can send it by post to the superintendent of police, who will pursue the matter.

Courts have been given power to punish blatant cases of perjury on the spot.

The period of detention in jail during remand shall be counted against the sentence of imprisonment ultimately awarded in the case.

Limits have been prescribed for the duration of security proceedings. Such proceedings shall ordinarily terminate, if they are not concluded within six months. Where the offence is punishable with imprisonment for two years or less, the investigation, if not completed within six months, can be stopped by a magistrate. Periods of limita-

tion on a graded scale for launching criminal prosecutions have been provided in cases not punishable with imprisonment for more than three years.

Legal aid at the expense of the State has been made compulsory in all sessions cases, if the accused is too poor to engage a counsel at his expense. The state governments have been empowered to extend this provision to other cases by a notification.

Separation of Judiciary from Executive

Complete separation of the Judiciary from the Executive, which is a Directive Principle of State Policy, has been brought about on a uniform pattern with effect from 1 April 1974 in all the states and union territories except Jammu and Kashmir, Nagaland and tribal areas.

UNION TERRITORIES

The union territories are administered by the President acting, to such extent as he thinks fit, through an administrator appointed by him.

The administrators of Arunachal Pradesh[1], Delhi, Goa, Daman and Diu, Mizoram and Pondicherry are designated as Lt.-Governors while the administrators of Andaman and Nicobar Islands, and Chandigarh are designated as Chief Commissioners. The Lt.-Governor of Goa, Daman and Diu is concurrently the Administrator of Dadra and Nagar Haveli. Lakshadweep has a separate administrator.

The union territories of Arunachal Pradesh, Goa, Daman and Diu, Mizoram and Pondicherry have legislative assemblies and Councils of Ministers. Delhi has a metropolitan council and an executive council.

The legislative assemblies in the union territories may make laws with respect to matters in the State field, namely, those enumerated in List II or List III in the Seventh Schedule insofar as they are applicable in relation to union territories. Parliament can also make laws with respect to such matters for the union territories.

The Metropolitan Council in Delhi has the right to discuss and make recommendations about matters insofar as they relate to Delhi.

ZONAL COUNCILS

The states and union territories on the Mainland except those in the north-eastern region are grouped into zones. Each zone has a high-level advisory body known as the Zonal Council which provides the forum for discussing matters of common interest to the states and union territories in that zone. The states of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and the union territories of Chandigarh and Delhi are in the Northern Zone. The Central Zone comprises the states of Madhya Pradesh and Uttar Pradesh while the states of Bihar, Orissa and West Bengal are in the Eastern Zone. The states of Gujarat and Maharashtra and the union territories of Goa, Daman and Diu, and Dadra and Nagar Haveli are in the Western Zone. The Southern Zone comprises the states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu and the union territory of Pondicherry.

For the north-eastern region there is a body similar to the Zonal Councils to deal with matters of common interest in the states of Assam, Manipur, Meghalaya, Nagaland and Tripura and the union territories of Arunachal Pradesh and Mizoram. The North-Eastern Council, which came into being in August 1972, has certain additional functions. It has to formulate a unified and co-ordinated regional

[1]Under the Government of Union Territories (Amendment) Act, 1975 the union territory of Arunachal Pradesh has come under a Lt.Governor from 15 August 1975. The Pradesh Council and counsellors were replaced by a legislative assembly and a Council of Ministers, respectively.

plan (which is in addition to the state plans) covering matters of common importance. In respect of projects or schemes intended to benefit two or more states, the Council has to recommend the manner in which they may be executed, managed or maintained, their benefits shared and the expenditure incurred. The progress of implementation of the plan and the expenditure thereon are supervised by the Council. The Council has to review from time to time the measures taken by the states for maintenance of security and public order and, as and when necessary, recommend further measures in this behalf.

LOCAL GOVERNMENT

Municipal Corporations

In most of the states Corporations have been established for major cities under specific acts of the state legislature. These are headed by elected mayors. The administration of the city vests in an elected council and the powers of the corporation are exercised by three authorities: (i) general council of the corporation; (ii) standing committees; and (iii) the municipal commissioner/chief executive officer. The standing committees are elected by the council and carry out most of the work of administration including taxation, finance and preparation of budget, engineering works and health and education services. The power of sanctioning estimates and contracts vests in the three authorities up to specified amounts. The general council appoints most of the officers of the corporation but the municipal commissioner is appointed by the state government. The executive powers of the corporation generally vests in the municipal commissioner who prescribes the duties of the various officers and supervises their work. The functions of the municipal corporation include public safety, health, education and other conveniences of the citizens as well as construction and maintenance of water works and sewerage, streets and bridges, parks and recreation grounds, markets and shopping centres and so on. Major corporations also undertake works of housing and land development. But there is growing practice of entrusting these works to special urban development authorities. There were 34 municipal corporations in the country in May 1975.

Municipal Committees and Councils

For all other towns and cities there are municipalities having elected boards or councils which in turn elect their own presidents. In Maharashtra a system of direct election of presidents was introduced in 1974. All the members of a municipality constitute its general body which decides all questions of policy and important details of municipal administration. The powers of passing the budget, imposing taxes, voting expenditure and making rules and regulations vest in the general body. The municipal council, however, mostly functions through committees which exercise delegated powers or make recommendations to the council. The day-to-day work of the municipality is carried on by an executive officer, drawn sometimes from state civil service or a state-wide cadre of municipal officers. In many states, however, the municipal councils continue to appoint their own executive officers and other officials.

Local Self-Government in Districts

The system of Panchayati Raj or democratic decentralisation involves a three-tier structure of local self-governing bodies at the village, block and district levels. Specific powers and functions in the field of development and local administration have been assigned to Panchayati Raj institutions. Panchayati Raj now covers all states except Meghalaya, Nagaland and 23 out of 31 districts in Bihar.

Village Panchayats

Panchayats are elected by Gram Sabhas consisting of the entire adult population of the village. Elected by and from among the villagers, they are responsible for agricultural production, rural industries, medical relief, maternity and child welfare, management of common grazing grounds, maintenance of village roads, streets, tanks and wells and provision of sanitation and drainage. In some places Panchayats also look after primary education, maintenance of village records and the collection of land revenue. For building up funds they levy tax on houses and lands, fairs and festivals and sale of goods, impose octroi duties, and build up remunerative community assets.

In some states, Nyaya Panchayats with judicial functions have been set up. They are competent to try cases involving minor offences under the Indian Penal Code and other special and local laws. Their powers of punishment are limited to the imposition of moderate fines and they employ simple and summary procedure for the disposal of cases. Legal practitioners are not permitted to appear before them.

Cantonment Boards

Cantonment boards have been set up in cantonment areas to provide civic amenities and welfare services to the people living there. These boards are autonomous bodies subject to supervision and control by GOC-in-C of the Command and the central government. The number of elected and nominated members is kept equal in these boards varying from 1 to 7 although according to statutory provisions the number of nominated members may exceed the elected members by one. These boards have the power of taxation which is their main source of revenue. The budget estimates prepared by the boards are scrutinised and sanctioned by the GOC-in-C of the Command. There were 62 cantonment boards on 1 January 1975.

4 DEFENCE

India's defence policy aims at promoting and sustaining durable peace in the sub-continent by means of negotiations and co-operation among various countries in the region and at the same time equipping the defence forces as a safeguard against aggression.

The supreme command of the Armed Forces is vested in the President of India. The responsibility for national defence, however, rests with the Cabinet. All important questions having a bearing on defence are decided by the Cabinet Committee on Political Affairs, which is presided over by the Prime Minister. The Defence Minister is responsible to Parliament for all matters concerning the Defence Services. The administrative and operational control of the Armed Forces is exercised by the Ministry of Defence and the three Services Headquarters. The Ministry of Defence acts as the central agency for ensuring a co-ordinated development of the three Services, for conveying the Government of India's decisions on policy matters to the three Services Headquarters for implementation and for obtaining financial sanction for defence expenditure from Parliament.

ORGANISATION The three Services function under their respective Chiefs of Staff. As on 1 June 1975 the Chiefs of Staff were:

Chief of the Army Staff	General T.N. Raina
Chief of the Naval Staff	Admiral S.N. Kohli
Chief of the Air Staff	Air Chief Marshal O.P. Mehra

Army At the Army Headquarters, in New Delhi, the Chief of the Army Staff is assisted by the Vice Chief of the Army Staff and five other Principal Staff Officers—Deputy Chief of Army Staff, Adjutant-General, Quartermaster-General, Master-General of Ordnance and Military Secretary—and a Head of Branch, namely Engineer-in-Chief.

The Army is organised into five Commands—Western, Eastern, Northern, Southern and Central—each under a General Officer Commanding-in-Chief of the rank of a Lieutenant-General. The Commands are divided into Areas, Independent Sub-Areas and Sub-Areas. An Area is commanded by a General Officer Commanding of the rank of Major-General and an Independent Sub-Area and Sub-Area by a Brigadier.

The Army consists of a number of arms and services. These are: Infantry, Armoured Corps, Regiment of Artillery, Corps of Engineers, Corps of Signals, Army Service Corps, Army Ordnance Corps, Army Medical Corps, Army Dental Corps, Corps of Electrical and Mechanical Engineers, Army Education Corps, Remount and Veterinary Corps, Army Postal Service Corps, Corps of Military Police, Intelligence Corps and Defence Security Corps.

The sanctioned strength of all ranks of the Army is 8.38 lakhs.

Navy The operational control of the Navy is exercised by the Naval Headquarters in New Delhi through a chain of commands.

At the Headquarters, the Chief of the Naval Staff is assisted by five Principal Staff Officers, namely, the Vice Chief of the Naval Staff,

Chief of Personnel, Chief of Material, Chief of Logistics and Deputy Chief of the Naval Staff.

The Navy is organised into three Commands: Western Naval Command under the Flag Officer Commanding-in-Chief, Western Naval Command, Bombay; Eastern Naval Command under the Flag Officer Commanding-in-Chief, Eastern Naval Command, Visakhapatnam and Southern Naval Area under the Flag Officer Commanding, Southern Naval Area, Cochin.

The Navy has two Fleets—the Western Fleet and the Eastern Fleet. The two Fleets consist of the aircraft-carrier *INS Vikrant*, two cruisers, a number of frigate squadrons, including some of the latest types of anti-submarine and anti-aircraft frigates, a squadron of anti-submarine patrol vessels, one mine-sweeping squadron, conventional type submarines, a submarine depot ship and fast boats carrying surface-to-surface guided missiles. A squadron of Sea-king helicopters augments the air component of the aircraft-carrier *INS Vikrant*. Besides, there are some survey ships, a fleet tanker and a number of auxiliary craft. The survey unit of the Navy carries out survey of India's coast and approaches to the harbours. A naval organisation, under the Naval Officer-in-Charge, Andamans and Nicobars, is functioning at Port Blair to ensure the security of the Bay Islands. A naval establishment, *INS Kardeep*, has been established at Kamorta in the Nicobar Islands.

A naval base and dockyard is being developed at Visakhaptnam on the east coast. The first phase of modernisation and expansion programme of the Naval Dockyard, Bombay, has been completed and the second phase is under way. The development of a naval base at Okha has been taken in hand and a Coast Battery has already been set up. The phased development of Port Blair as an advanced naval base has been approved.

Since 1964, India has been building her own naval craft. A survey ship, three defence boats, four Harbour Utility Tugs and two Leander class frigates (*Nilgiri* and *Himgiri*) have already been commissioned. Two more Leander class frigates, three seaward defence boats, an ocean-going tug, two Landing Craft Utilities, and three tankers are under construction.

Air Force

The Indian Air Force is organised into five Commands and an independent Operational Group. These are: Western Air Command, Central Air Command, Eastern Air Command, Training Command, Maintenance Command and No. 1 (Opl.) Group.

At the Air Headquarters in New Delhi, the Chief of the Air Staff is assisted by four Principal Staff Officers, namely, Vice Chief of the Air Staff, Deputy Chief of the Air Staff, Air Officer-in-Charge, Administration and Air Officer-in-Charge, Maintenance. Each of them controls a group of Directorates.

The Air Force fleet, which is made up of 45 squadrons, consists of a variety of fighter, fighter bomber, fighter interceptor bomber, transport and maritime reconnaissance aircraft. Among the fighter aircraft are SU-7s, Hunters, Gnats, MiG-21s and HF-24s. Canberras comprise the bomber fleet. The transport fleet consists of AN-12s, IL-14s, Dakotas, Fairchild Packets, Caribous, Otters, TU-124s and India-built HS-748s. Super-Constellations are deployed for maritime reconnaissance. Helicopters in use are MI-4s, MI-8s and Alouettes, the last being built in India. India-built HT-2 andHJT-16 (Kiran), T6G Texan, Dakotas and Vampires are used for training purposes.

Commissioned Ranks

The following are the commissioned ranks in the three Services; each rank is shown opposite to its equivalent in the other Services.

Army	*Navy*	*Air Force*
General	Admiral	Air Chief Marshal
Lieutenant-General	Vice-Admiral	Air Marshal
Major-General	Rear-Admiral	Air Vice-Marshal
Brigadier	Commodore	Air Commodore
Colonel	Captain	Group Captain
Lieutenant-Colonel	Commander	Wing Commander
Major	Lieutenant-Commander	Squadron Leader
Captain	Lieutenant	Flight Lieutenant
Lieutenant	Sub-Lieutenant	Flying Officer
Second Lieutenant		Pilot Officer

EXPENDITURE

Table 4.1 shows the trend in total defence expenditure since 1964-65, its percentage to the total expenditure of the union government and its percentage to the gross national product.

TABLE 4.1 DEFENCE EXPENDITURE

Year	Total defence expenditure (Rs crores)	Total expenditure of Govt. of India (Rs crores)	Gross national product[1] (Rs crores)	Defence expenditure as percentage of total Govt. expenditure	Defence expenditure as percentage of gross national product
1964-65	806	2,902	21,111	27.8	3.8
1965-66	885	2,946	21,856	30.0	4.0
1966-67	909	3,798	25,198	23.9	3.6
1967-68	968	3,533	29,714	27.4	3.3
1968-69	1,033	3,431	30,560	30.1	3.4
1969-70	1,101	3,912	33,883	28.1	3.2
1970-71	1,199	4,855	36,730	24.7	3.3
1971-72	1,525	5,719	38,899	26.7	3.9
1972-73	1,652	5,944	42,136	27.8	3.9
1973-74	1,681	5,845	52,193	28.8	3.2
1974-75 (RE)	2,157	8,118	58,090	26.6	3.7
1975-76 (BE)	2,274	8,798	N.A.	25.8	N.A.

[1]Based on Economic Survey 1974-75. RE—Revised estimates. BE—Budget estimates. N.A.—Not available. *Note*: Assumed growth rate for 1974-75 is 11.3 per cent. *Source*—Ministry of Defence

TRAINING INSTITUTIONS
National Defence Academy

The National Defence Academy, Khadakvasla, conducts a three-year combined basic military training course for potential officers of the three Services after which they receive specialised training at their respective Service establishments. The cadets are also trained up to the degree level of an Indian university. Admissions to the Academy are made on the basis of a qualifying bi-annual written examination conducted by the Union Public Service Commission at different centres in the country, followed by an interview before a Services Selection Board. Boys who have passed the Higher Secondary or an equivalent examination and are between 16 and 18½ years of age on the first day of the month in which the course starts are eligible for admission. They must be unmarried and remain so during the period of their stay at the Academy.

All expenses of the cadets while at the Academy, except the pocket expense of Rs 30 per month, are met by the government. Where the monthly income of parents is less than Rs 350, even this expense is borne by the government.

Defence Services Staff College

The Staff College at Wellington provides training for staff appointments to serving officers on an inter-Services basis. About 300 officers from the three Services are trained every year.

National Defence College

The National Defence College in New Delhi trains senior officers of the three Services and senior civilian officers of the central services in politico-military studies.

Armed Forces Medical College

The Armed Forces Medical College, Poona, besides imparting training to newly commissioned medical officers, runs refresher courses for medical officers of the Armed Forces as well as specialist courses in hygiene, X-ray, blood-transfusion and pathology. It also conducts an MBBS course and a degree course in nursing.

Army Colleges and Schools

The Indian Military Academy, Dehra Dun, is the premier centre for training officers of the Army. Cadets passing out of the National Defence Academy at Khadakvasla receive one year's training at Dehra Dun before being commissioned. The other categories of entrants in higher age groups are those who have qualified in the competitive entrance examination of the Union Public Service Commission and the Services Selection Board for 1½ years' training, graduate cadets of the NCC for a year and a half, other graduates selected for specialised commissions in the technical arms for a year and serving regular or Territorial Army personnel—JCOs and NCOs—for one year, joining through the Army Cadet College.

The Army Cadet College in Poona trains selected Other Ranks to acquire officer qualities and general academic education for entry to the Military Academy for the grant of commissions.

The Officers' Training School at Madras trains officers who are granted Short Service Commisions in the Army.

The College of Combat, Mhow, conducts the Higher Command Course, the Senior Command Course and the Junior Command Course. The College of Military Engineering, Kirkee, imparts training to officers and Other Ranks in all aspects of military engineering. Longer courses of over two years' duration are also conducted to train officers up to the degree standard. The Military College of Telecommunication Engineering at Mhow imparts basic and advanced technical training in telecommunications and signal tactics.

The Armoured Corps Centre and School, Ahmadnagar, conducts training in the tactical handling of armoured fighting vehicles and their driving and maintenance. The School of Artillery, Deolali, provides training in field branch and air defence artillery. The Infantry Schools at Mhow and Belgaum conduct courses for infantry officers and men. The Army Ordanance Corps School at Jabalpur imparts specialised corps training in the identification and preservation of all items, including ammunition and explosives stocked by the ordnance depots.

The Institutes of Defence Management at Secunderabad trains Service and civilian officers in modern defence management techniques.

Some of the other Army training centres and schools are: the High Altitude Warfare School; Counter Insurgency and Jungle Warfare School; the Army Service Corps School, Bareilly; EME School, Baroda; Military College of Electronics and Mechanical Engineering, Secunderabad; Remount Veterinary Corps Centre and School, Meerut; Army Education Corps Training College and Centre, Pachmarhi; Intelligence Training School and Depot, Poona; Corps of Military Police Centre and School, Faizabad; Army School of Physical Training,

Poona; Army Air Transport Support School, Agra; and the Army Clerks' Training School, Aurangabad.

Naval Training Establishments

INS Venduruthy and the Naval Air Station, *Garuda*, both located at Cochin, are the principal training centres for the officers and men of the Navy. While *INS Venduruthy* imparts training in gunnery, navigation, torpedo and anti-submarine and communications, *Garuda* has training aircraft of the Navy and some training schools.

Mechanical engineers and artificers are trained at *INS Shivaji* in Lonavla (Maharashtra). Junior engineers and electrical officers of the Service receive training at the engineering college at Lonavla.

INS Valsura, Jamnagar, (Gujarat) trains officers and men of the Electrical Branch of the Service. With most of the ships now fitted with complicated electronic equipment, training has been geared to the present requirements of the Service.

New recruits joining the Navy are trained at *INS Circars*, Visakhapatnam, and on completion of their courses become sailors. Sea training is imparted by the two Fleets. Officers and men of the Supply and Secretariat Branch are trained at *INS Hamla*, Malad, Bombay.

To meet the increasing training requirements, a naval academy has been established at Cochin in Kerala. A Sailors' Training Establishment is being set up at Dabolim in Goa. The Boys' Training Establishment, now at Visakhapatnam, is to be moved to Chilka Lake in Orissa. The First Training Squadron has been raised to give sea training to officers and seamen.

Air Force Training Institutions

The basic flying training for pupil pilots is imparted at the Elementary Flying School at Bidar and the intermediate training at the Air Force Academy, Hyderabad. Advanced flying and conversion training on jets and twin-engined aircrafts is conducted at the Fighter Training and Transport Training Wings of the Air Force at Hakimpet and Yelahanka. Pupil navigators receive their initial training at Hyderabad. Ground Duties (Non-technical) officers are also now trained at the Air Force Academy.

The Air Force Administrative College, Coimbatore, runs advanced courses for Ground Duties (Non-technical) officers and the Junior Commanders' course for all branches, Technical officers are trained at the Air Force Technical college, Jalahalli. Senior technical officers with more than 13 years of service are trained in management techniques at the Air Force Station, Jalahalli. A school at Sambre near Belgaum trains airmen in accounting, equipment, general offices duties, drill instrumention and catering. Schools at Jalahalli train airmen in higher signals, electrical instruments and police duties. Flying instructors are trained at a school at Tambaram. Another school, located at Tambaram, trains airmen in workshop trades such as air frame, engine armament, safety equipment, photo and motor mechanics. A school for higher staff studies in joint air warfare is functioning at Hyderabad. Para-troopers for air-borne units of the Army are trained at the Paratroopers Training School, Agra.

Medical and aircrew officers receive specialised training at the Institute of Aviation Medicine, Bangalore.

Rashtriya Indian Military College

Run on the lines of public schools, the Rashtriya Indian Military College, Dehra Dun, prepares future officers for the three Services by imparting preliminary pre-cadet training to pupils who desire sub-

sequently to choose a military career. It serves as a feeder to the National Defence Academy.

Sainik Schools

Like the Rashtriya Indian Military College, 17 Sainik Schools prepare boys in the age group 9-18 for the entrance examination of the National Defence Academy. So far, 1,588 boys from these schools have been admitted to the Academy.

SUPPLIES, PRODUCTION AND RESEARCH

A substantial part of the defence stores needed by the Services is now being developed and produced in the country. The responsibility for this has been entrusted to two separate Departments—Defence Production and Defence Supplies—in the Ministry of Defence. The Department of Defence Production organises, directs and co-ordinates production of material and equipment required by the Armed Forces. It carries out its responsibility through the Directorates of Technical Development and Production,Ordnance Factories, Inspection, Standardisation, Defence Research and Development Organisation and nine public sector undertakings.

The Department of Defence Supplies handles the problems of indigenisation of defence stores by making useof the facilities available in the civil sector. The Department also helps in establishing the production of newly developed items. In the task of indigenisation, it operates through a number of technical committees.

The Defence Production Board formulates policies in the field of production and plans future growth on balanced and economic lines. The policy on foreign collaboration agreements for defence production was announced by the government on 25 April 1973. Under this, the existing practice of periodic extension of such agreements will be ended. Instead, outright purchase will be made of the required know-how which will be improved by research and development within the country.

Ordnance Factories

Thirty-one ordnance factories under the control of the Department of Defence Production produce a wide variety of stores and equipment for the Armed Forces. These range from highly sophisticated defence equipment like tanks, guns, ammunition, instruments, bridges, anti-submarine projectiles, explosives and vehicles to certain specialised items of food and clothing. The ordnance factories now meet the entire requirements of the Army in respect of small arms and light artillery. The bulk of guns and ammunition required by artillery regiments and mountain divisions as well as various items of ammunition required by the Navy and the Air Force are being met by them.

There is a continuous process of rehabilitating and modernising the ordnance factories and augmenting their capacities to meet the increasing requirements of the Services and to achieve self-sufficiency in the production of modern defence stores. Production of bridges and mortar bomb components and other items has been taken up. A major explosives project has been completed. A new project for the manufacture of propellants and ballistics is making progress. A new plant for the manufacture of nitric acid and a modern TNT plant are also being established. The production of 105mm Indian field gun, MK.—I, has been established from within the existing capacities available for the manufacture of other guns. Some new items of vision and sighting instruments as well as optical instruments for missiles have already been produced. A Special Steel Project to provide special steels of critical specifications required for modern

armaments and a project for the manufacture of 7.62 mm medium machine gun have been approved.

Defence Undertakings in Public Sector

Nine public sector undertakings, employing about 80,000 persons and controlled by the Department of Defence Production, are currently engaged in the manufacture of various types of equipment for the Armed Forces as well as for civilian use. The largest of these undertakings is the Hindustan Aeronautics Ltd. Set up in 1964, it has eleven factories located in six different states. Six of these factories including the unit at Bangalore constitute the Bangalore complex and the three factories at Hyderabad, Koraput and Nasik division comprise MiG complex. The remaining two at Kanpur and Lucknow manufacture HS-748 and accessories respectively. It is currently manufacturing supersonic jet fighter Marut MK-I, supersonic jet interceptor MiG-21M, light jet fighter Gnat, the jet trainer Kiran, the Alouette-III (Chetak) and Cheetah helicopters, the transport aircraft HS-748, the agricultural aircraft 'Basant' and air-to-air missiles.

The Bharat Electronics (BEL) at Bangalore, which started production in 1956 with only two electronic items, has diversified its production and now manufactures over 60 different items of equipment. These range from tiny transmitters to highly sophisticated radars. BEL is also producing a number of electronic components, *e.g.*, radio and television receiving valves, germanium and silicon transistors and diodes, X-ray tubes and TV picture tubes. A new unit of BEL has been set up at Ghaziabad for the production of electronic equipment to meet the needs of an air defence ground environment system.

The Mazagon Dock, Bombay, the Goa Shipyard and the Garden Reach Workshops, Calcutta, are building and repairing ships, dredgers, barges and tugs. The Mazagon Dock is also building Leander class frigates for the Navy. To date, it has built two frigates—INS *Nilgiri* and INS *Himgiri*, two passenger-cum-cargo vessels, five dredgers, two mine sweepers, two AVCAT tankers, four tugs, three pontoons, four passenger ferry boats, one motor cutter, one water boat, two launches, twenty-one fishing trawlers and thirty-six barges. In the Goa Shipyard, four naval tugs and two 500-ton barges are being built. The Garden Reach Workshops are building four dredgers, including one hopper capacity dredger and four tugs.

The Bharat Dynamics Ltd. at Hyderabad, which was set up in 1970 for manufacturing anti-tank missiles, has succeeded in achieving an indigenous content of 65 per cent in this sophisticated field.

The Bharat Earthmovers Ltd. at Bangalore manufactures broad-gauge railway coaches and heavy earth-moving equipment.

The Praga Tools at Hyderabad manufactures such items as drilling tools and cutter grinders, surface grinders, milling machines, machine tool accessories and railway screw coupling, auto diesel spares, forgings and castings.

The Mishra Dhatu Nigam Ltd., Hyderabad was incorporated in 1973 to set up a factory for the manufacture of special metals and super alloys required for aeronautics, electronics and missiles. The factory is expected to commence production in 1978.

Research and Development

The Defence Research and Development Organisation, created in 1958, has the primary responsibility to design and develop weapons system and equipment based on the operational requirements projected by the Services, help in their indigenous production and render scientific advice to the three Services. To achieve this, it makes use of basic,

applied and operational research for the fabrication of instruments, weapons, ammunition, engineering and general stores, telecommunication equipment and other critical materials (For details, see chapter 'Scientific Research').

TERRITORIAL ARMY

The Territorial Army, which started in 1949, is designed to give the youth of the country an opportunity for receiving military training in their spare time and to serve the country in times of emergency by providing units to the regular Army. It is voluntary force of citizens and has units of Air Defence, Infantry, Signals, Engineers and Medical. It is not required to perform military service outside India save under a general or special order of the central government.

All able-bodied nationals of India between the ages of 18 and 35 (with relaxation in the upper age limit for entry into certain technical units) and possessing the requisite qualifications are eligible to join the Territorial Army as an officer or Other Rank.

A limited number of appointments on the permanent staff, with a tenure of three to five years, are offered to all ranks of the Territorial Army provided they possess the necessary experience and qualifications. Territorial Army personnel are also entitled to the award of decorations and medals.

NATIONAL CADET CORPS

The National Cadet Corps strives to stimulate interest among the youth in the defence of the country so as to build up a reserve of manpower to enable the Armed Forces to expand rapidly. The participants have, however, no liability for active military service. Participation in the NCC, which was made compulsory for all able-bodied college students in 1964, is now entirely voluntary except in two of the Indian universities—Agricultural University, Hissar and University of Agricultural Sciences, Bangalore. A certain percentage of the total intake of candidates for commissioned ranks in the Army, Navy and Air Force, on the basis of direct entry to the Armed Forces training institutions, is reserved for NCC cadets of the three Services.

The NCC consists of three divisions: Senior, Junior and Girls. The strength of the Corps on 1, April 1975 was 10,17,163. Of this 3,67,413 were in the Senior Division and 6,49,750 in the Junior Division. The number of girls on that date was 52,614 in the Senior Division and 60,661 in the Junior Division.

WELFARE OF EX-SERVICEMEN

The Director-General of Resettlement in the Defence Ministry looks after the resettlement of ex-Servicemen in government and private services, vocational and technical trades, land colonies and transport services. A certain percentage of vacancies has been reserved by both the central and state governments for the ex-Servicemen. To encourage self-employment, several schemes are being implemented in stages. These include establishment of ex-Servicemen's co-operative industrial estates in selected areas, setting up of industrial and shopping centres by using surplus military land, reservation of factory plots and formation of special industrial projects. There are also other schemes in operation which train ex-Servicemen who prefer employment in professions needing background expertise and knowledge. These include training in industrial and agricultural skills, animal husbandry, teaching and social work.

An important organisation which assists ex-Servicemen and their families, in close liaison with the local administration, is the Soldiers', Sailors' and Airmen's Board. The Board, with its headquarters in New

Delhi, co-ordinates the activities of the corresponding State Boards. A number of central funds like the Flag Day Fund, the Armed Forces Benevolent Fund and the Armed Forces Reconstruction Fund are also used for the rehabilitation of ex-Servicemen.

REHABILITATION OF WAR VICTIMS

Following the Indo-Pak war in December 1971, both the central and state governments formulated a number of schemes to extend benefits and facilities to the war-bereaved families particularly the widows, the disabled and their dependents. A special organisation in the Ministry of Defence has been created to co-ordinate action on the various schemes. Among the important central schemes is one which allows liberal pension/concessions for the widows and families of officers and men killed in action and for those disabled. The scheme, which came into operation from 1 February 1972, is more liberal than any scheme elsewhere in the world and covers all those affected in the military operations since the Pakistani aggression in Jammu and Kashmir in 1947. This apart, the central government is to meet the full cost of education up to the first degree of the dependents of all the personnel of the defence and para-military forces killed or permanently disabled. It will also bear the full cost of such dependents as have already taken up post-graduate courses.

Other schemes, which are in addition to existing concessions, relate to priority in obtaining employment under the central government and public undertakings. Disabled servicemen are entitled to concessions in age, educational qualifications and medical standards. Up to two family members of each servicemen killed in action will be given Class III and Class IV jobs under the Ministry of Defence without registration at the Employment Exchanges. Seats have also been reserved for them in technical institutions. A special fund of Rs 5 crores has been created in the Ministry of Defence to meet those needs of war-bereaved families which cannot be met through the regular facilities extended by central and state governments.

State schemes include cash grants, ex-gratia allotment of land for agricultural purposes and residential plots on concessional rates.

5 EDUCATION

The literacy rate in India has gone up from 16.6 per cent in 1951 to 29.45 per cent in 1971. Eightysix per cent of children in the age group 6-11 are today at school as compared to 33 per cent two and a half decades ago. Primary education is now free in all the states and compulsory in most of the states. There were about 8.58 crore students in schools in 1973 as against 2.35 crores in 1950-51. At the university stage, the number of students increased by about nine times and that of colleges more than six times.

Education in India is primarily the responsibility of state governments but the union government has also been entrusted with certain responsibilities specified in the Constitution. These include co-ordination of educational facilities, determination of standards of higher education, scientific and technical education, research, and promotion of Hindi and all other Indian languages. Most of the educational development plans are formulated and implemented with some assistance from the central government, which is also responsible for the running of seven central universities of Aligarh, Banaras, Delhi, Hyderabad, Jawaharlal Nehru, North-Eastern Hill and Visva Bharati and other similar institutions. It also runs 187 Kendriya Vidyalayas (central schools) in different parts of the country. A special responsibility of the union government is the promotion of the education of the weaker sections.

POLICY

An Education Commission was appointed in 1964 with Dr D.C. Kothari as chairman to advise the union government on a national pattern and development of education. Based largely on its recommendations, the government formulated a National Policy on Education which was issued in the form of a government resolution in 1968. The key points were: (i) free and compulsory education up to the age of 14; (ii) improved status, emoluments and education of teachers; (iii) three-language formula and development of regional languages; (iv) equalisation of education of science and research; (v) development of education for agriculture and industry; (vi) improvement in quality and production of inexpensive text-books; and (vii) investment of 6 per cent of national income in education.

PATTERN

The predominant pattern of education in the country comprises eight years of integrated elementary education, three years of secondary education with diversified courses to give it a vocational bias and make it a terminal point for entry into a trade or profession, and three years of university education leading to the first degree. Some of the states have adopted a pattern of seven years of elementary education followed by four years of secondary education.

The Education Commission had, however, suggested a uniform (10+2+3) pattern of 15 years' duration leading to the first degree (10 years of high school education, two years of higher secondary education and three years for the first degree course). The new pattern has already been introduced in Andhra Pradesh, Karnataka, Kerala, Maharashtra, Andaman and Nicobar Islands, Arunachal Pradesh, Chandigarh, Delhi and Lakshadweep. The scheme is being introduced in 1975-76 in Jammu and Kashmir, and Goa, Daman and Diu.

TABLE 5.1

ACHIEVEMENTS AND TARGETS AT DIFFERENT LEVELS OF EDUCATION

	1950-51	1955-56	1960-61	1965-66	1973-74[1]	Fifth Plan targets
Number of pupils in classes I to V (*lakhs*)	191.5	251.7	349.9	504.7	631.9	782.1
Percentage thereof to total population in age group 6-11	42.6	52.8	62.4	76.7	83.5	97.1
Number of pupils in classes VI to VIII (*lakhs*)	31.2	42.9	67.0	105.3	146.9	215.8
Percentage thereof to total population in age group 11-14	12.7	16.5	22.5	30.8	35.6	47.1
Number of pupils in classes IX to XI/XII (*lakhs*)	12.2	18.8	28.9	50.4	74.8	112.1
Percentage thereof to total population in age group 14-17	5.3	7.4	10.6	16.2	21.2	26.1
Number of pupils at the university stage—arts, science and commerce (*lakhs*)	3.6	6.3	8.9	14.9	31.7	46.5
Percentage thereof to total population in age group 17-23	0.8	1.4	1.8	2.7	5.0	6.0
Percentage of students reading science at university stage	37.8	33.0	26.9	29.5	49.7	—
Number of primary/junior basic schools	2,09,671	2,78,135	2,30,399	3,91,064	4,29,888	—
Number of middle/senior basic schools	13,596	21,730	49,663	75,798	97,356	—
Number of high/higher secondary schools	7,288	10,838	17,257	27,477	40,127	—
Number of multi-purpose schools	—	255	2,115	2,386	2,612[2]	—
Number of training schools	782	939	1,138	601	446	—
Number of training colleges	53	107	478	1,272	1,120	—
Number of arts, science (including research institutions) and commerce colleges	542	772	1,122	1,788	3,337	—
Number of universities	27	32	45	64	94	—
Number of teachers						
Primary schools	5,37,918	6,91,249	7,41,515	9,44,377	11,68,363	—
	(58.8)	(61.2)	(64.1)	(70.5)	(82.6)	—
Middle schools	85,496	1,48,394	3,45,228	5,27,754	7,04,573	—
	(53.3)	(58.5)	(66.5)	(76.9)	(84.9)	—
High/Higher secondary schools	1,26,504	1,89,939	2,96,305	4,79,060	6,48,049	—
	(53.8)	(59.7)	(64.1)	(68.5)	(80.4)	—
Universities, arts and science colleges	18,648	27,883	41,759	66,882	99,630[2]	—

[1] Provisional.

[2] Figures are for 1969-70.

Note: Figures in brackets represent the percentage of trained teachers.

Assam, Bihar, Gujarat, Himachal Pradesh and West Bengal have also decided to adopt it. Uttar Pradesh has already in operation the 12-year period of education at the school level. Now the state government has also decided to introduce three-year degree course.

PLANS AND EDUCATION

In the two decades of planned development since 1951, the number of educational institutions[1] has more than doubled. The number of teachers and students has gone up by about three times. The achievements during the last two decades and targets of the Fifth Plan are given in Table 5.1. Expenditure on education also went up from Rs 153 crores in the First Plan to Rs 781 crores in the Fourth Plan. The proposed outlay for the Fifth Plan is Rs 1,726 crores. Table 5.2 gives details of the expenditure.

TABLE 5.2 Expenditure[1] on Education in Four Plans and Outlay for Fifth Plan

Major heads	First three Plans	Fourth Plan: Likely expenditure (Rs crores)	Fourth Plan: Percentage	Fifth Plan: Proposed outlay (Rs crores)	Fifth Plan: Percentage
Elementary education	556.0	241.3	31	743.0	43
Secondary education		140.4	18	241.0	14
University education	149.0	198.9	25	337.0	20
Social education	11.0	4.1	1	35.0	2
Cultural programmes	10.0	11.1	1	35.0	2
Other educational programmes	96.0	82.4	11	171.0	10
TOTAL: General education	822.0	678.2	87	1,562.0	91
Technical education	194.0	102.4	13	164.0	9
GRAND TOTAL	1,016.0	780.6	100	1,726.0	100

[1]Estimated.

Broadly speaking, the Fourth Plan aimed at making progress towards implementing the Constitutional Directive of free and compulsory education for the age group 6-14. At secondary and higher stages of education more emphasis was laid on consolidation and diversification so as to meet the diverse needs of trained manpower of requisite standard. Table 5.3 shows the enrolment in 1969-70, achievements in 1974-75 and targets for 1975-76.

TABLE 5.3 Enrolment, Targets and Achievements in the Fourth Plan

(*in lakhs*)

Age group/classes		1969-70	1974-75 (Target)	1974-75 (Likely positions)	1975-76 (Target)
6-11/I-V	Boys ..	347.70(95)	405.59(102)	404.60(102)	416.08(100)
	Girls ..	207.16(50)	259.06(69)	258.78(70)	269.85(72)
	TOTAL ..	554.85(73)	664.65(86)	663.38(86)	685.92(88)
11-14/VI-VIII	Boys ..	92.75(47)	111.76(51)	111.96(50.5)	117.73(53)
	Girls ..	37.04(20)	50.29(25)	51.09(24)	55.54(26)
	TOTAL ..	129.79(34)	162.05(38)	163.05(38)	173.27(39)
14-17/IX-XI-XII	Boys ..	47.24(27)	65.74(32)	61.60(31)[1]	N.A.
	Girls ..	16.06(10)	24.73(13)	23.40(12)[1]	N.A.
	TOTAL ..	63.30(18)	90.47(23)	85.00(22)[1]	N.A.
17-23/University stage	TOTAL ..	22.37	26.60(3.9)[1]	30.00(4.4)[1]	N.A.

[1]Figures relate to 1973-74. N.A.—Not available

Note: Figures in brackets indicate enrolment as percentage of the population of relevant age-group.

[1]Excluding among others, adult education centres and technical institutions.

The Fifth Plan lays emphasis on (i) ensuring equality of educational opportunities as part of the overall plan of ensuring social justice; (ii) establishing closer links between the pattern of education, on the one hand, and the needs of development and the employment market, on the other; (iii) improvement of the quality of education imparted; and (iv) involvement of the academic community, including students, in the tasks of social and economic development.

ELEMENTARY EDUCATION

Under a Directive Principle of State Policy, free and compulsory education is to be provided for all children up to the age of 14. In pursuance of this directive, all states have introduced free education for children in the age group 6-11. It is also free for children in the age group 11-14 in all states except Orissa, Uttar Pradesh and West Bengal. Even in these states, girl students and students from backward communities get free education.

All states have compulsory Primary Education Acts except Manipur, Nagaland and Tripura. Of the union territories, Andaman and Nicobar Islands, Chandigarh and Delhi have such legislation. However, even where such legislation exists, penal clauses are seldom enforced because of socio-economic reasons. Instead, incentives such as mid-day meals, free books and uniforms are provided to attract children to school.

SECONDARY EDUCATION

Education is free up to the secondary stage in Andhra Pradesh, Gujarat, Karnataka, Kerala, Tamil Nadu, Andaman and Nicobar Islands, Arunachal Pradesh and Lakshadweep and in government institutions in Jammu and Kashmir, Nagaland, Dadra and Nagar Haveli and Pondicherry. It is free for girls in Madhya Pradesh, Manipur, Orissa, Rajasthan, Tripura and Uttar Pradesh. Children belonging to the scheduled castes and tribes get free education in all the states.

UNIVERSITY AND HIGHER EDUCATION

Higher education is imparted through arts, science and commerce and professional colleges, research institutions and institutions deemed to be universities under the University Grants Commission Act, 1956. There are at present 99 universities, 10 universities of national importance and nine institutions deemed to be universities.[1]

University Grants Commission

The University Grants Commission, set up in 1953, promotes and coordinates university education and determines and maintains standards of teaching, examination and research in the universities. It has the authority to enquire into the financial needs of the universities and to make appropriate grants to different universities and implement development schemes. It advises on the establishment of new universities and other matters referred to it.

VOCATIONAL AND TECHNICAL EDUCATION

Vocational and technical education is provided at school and higher levels. Most of the states have institutions for vocational and technical education at the secondary and higher secondary levels. These provide training in agriculture, commerce, engineering, forestry, medicine, animal husbandry, arts and crafts and primary school teacher training. The Industrial Training Institutes under the union Ministry of Labour and state labour departments also train persons who have read at least up to 8th or 9th standards. There are also junior technical schools which prepare students especially for the

1. Three more universities have been established. For the list, see Appendices.

engineering trades. A few pre-vocational training centres are also being conducted on an experimental basis with assistance from UNICEF and ILO.

Five National institutions at Bombay, Kanpur, Kharagpur, Madras and New Delhi provide facilities for high level of education and research in engineering and technology. These institutions admit about 1,250 students annually to under-graduate courses. Besides, these institutions along with the Indian Institute of Science, Bangalore, admit nearly 2,000 students every year to the post-graduate and research courses. In addition, 60 other engineering colleges and university departments offer facilities for post-graduate courses and research with an annual intake of about 2,400 students. There are also 14 regional engineering colleges and a number of other technological institutions and polytechnics providing facilities for education in various branches of engineering and technology. For specialised courses such as mining and metallurgy, industrial engineering, forge and foundry and architecture, a number of centres have been established. To integrate engineering education with practical training, a number of engineering colleges and polytechnics are now offering 'sandwich' courses in collaboration with industry. The duration of such courses for degree in engineering is 5½ years and for diploma 3½ years. To train teachers from technical institutions, there are four Technical Teachers Training Institutions.

The number of institutions for degree and diploma courses in engineering in 1974 was 146 and 289 respectively as compared to 53 and 89 in 1951. In 1974, the total number of students admitted to the degree and diploma courses was about 63,500.

India is now in a position to meet the technical manpower requirements during the next two Five Year Plans.

ADULT EDUCATION

Adult education has made rapid progress during the Five Year Plans. The number of literates in the age group 15-24 increased by 1.67 crores during 1961-71. The plan outlay for adult eduation has been raised from Rs 8 crores in the Fourth Plan to Rs 35 crores in the Fifth Plan.

Adult education is primarily the responsibility of the state governments. The union Ministry of Education and Social Welfare initiates pilot projects and provides supporting services. Nearly 200 voluntary organisations also carry out various programmes of adult education.

During recent years emphasis in adult education programmes has shifted from adult literacy to functional education related directly to the environmental and occupational needs of the learners and development needs of the society. These functional education programmes in the Fifth Plan include (a) Farmers' Functional Literacy Programme, (b) Polyvalent Adult Education Centre, and (c) Non-formal Education Programme for the age group 15-25.

The Farmers' Functional Literacy Programme, started as a pilot project in 1967-68, helps the illiterate farmers not only to acquire literacy but also to increase their productive potential and thereby agricultural production. This programme is jointly operated by the Ministries of Agriculture, Information and Broadcasting, and Education, who arrange farmers' training and national demonstration, provide radio support and operate functional literacy course for adult illiterate farmers, respectively. The programme now covers 107 districts. During 1974-75, 1.5 lakh farmers benefited from this.

The first Polyvalent Adult Centre has been set up in Bombay. It conducts a variety of integrated vocational-cum-general education

programmes for groups of workers in the organised and unorganised centres. These programmes are drawn up on the basis of specific needs of particular groups of working adults and are held at a time and place convenient to the learners.

The Non-formal Education Programme has been introduced for the first time in the Fifth Plan because full time institutional education is unable by itself to meet the requirements of illiterates and semi-illiterates. This programme is an integrated problem oriented, environment based course. It comprises knowledge of the living environment and how the young can adjust to it, family life, education, health and hygiene, literacy skills and initial functional training leading to employment and self-employment. To begin with, it aims at the most potential adult group, *i.e.*, youth in the age group 15-25.

The achievements made in the field of adult literacy during 1961-71 are given below.

TABLE 5.4
ACHIEVEMENTS IN ADULT EDUCATION

(in lakhs)

Age group	1961 census				1971 census			
	No. of literates		No. of illiterates		No. of literates		No. of illiterates	
15-24	263.3	(35.97)	468.8	(64.03)	430.1	(47.5)	475.9	(52.5)
25-34	192.3	(28.5)	489.9	(71.5)	260.0	(33.9)	500.1	(66.1)
35+	262.7	(22.3)	917.7	(77.7)	366.2	(24.5)	1126.7	(75.5)

Note: Figures in brackets indicate percentage to total population in that age group.

WOMEN'S EDUCATION

The central and state governments have taken a number of steps to stimulate the education of girls and women. These include creation of separate cells in the state Directorates of Education to look after programmes for girls' education, establishment of polytechnics for girls, construction of staff quarters for women teachers in rural areas and girls' hostels, introduction of condensed educational courses, assistance to voluntary educational organisations working in the field of women's education and holding of seminars in different states to discuss problems and programmes of girls' education.

The National Council for Women's Education advises the central and state governments in framing programmes and policies for education of women.

There were about 3.33 crore girls at schools in 1974-75—2.59 crores in classes I to V, 51.09 lakhs in classes VI to VIII and 23.40 lakhs in classes IX to XII. (See also Table 5.3)

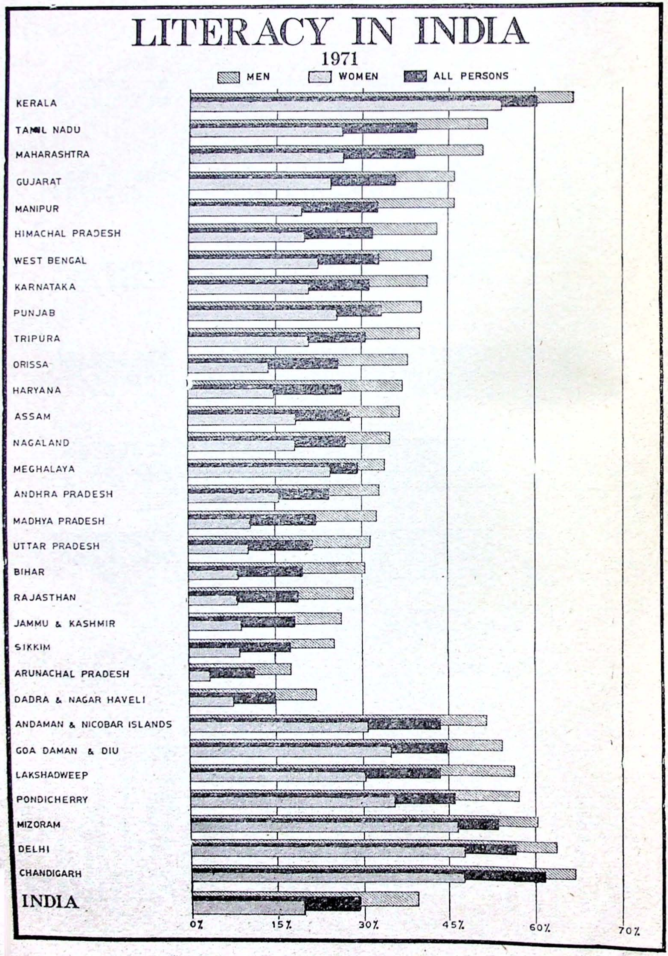
LITERACY

In 1951, only 16.6 per cent of the people in India could read and write. The percentage went up to 24.0 in 1961 and to 29.45 in 1971. According to the 1971 census (see Table 5.5), Kerala had the highest literacy rate, 60.42 per cent, Tamil Nadu and Maharashtra came next with 39.46 and 39.18 per cent respectively. Chandigarh led the union territories with a percentage of 61.56. Despite the rise in the literacy rate and the total number of literates, the number of illiterates has increased from 33.4 crores in 1961 to 38.6 crores in 1971 due to fast growing population. Rural folk and women form the bulk of illiterates. In 1971, more than half the people, nearly 52.4 per cent, were literate in urban areas, whereas less than one fourth of the rural population, 23.7 per cent, was literate. Kerala topped the states in women's literacy also, the percentage being 54.31. Tamil Nadu with 26.86 and Maharashtra with 26.43 came second and third respectively. Among the union territories, first place was held again by Chandigarh with 54.35 per cent.

TABLE 5.5
LITERACY[1]

State/Union Territory	Literates			Percentage of Literacy		
	Persons	Males	Females	Persons	Males	Females
INDIA	**16,14,15,010**	**11,20,43,424**	**4,93,71,586**	**29.45**	**39.45**	**18.69**
States						
Andhra Pradesh	1,06,89,665	73,03,297	33,86,368	24.57	33,18	15.75
Assam	41,16,771	28,29,242	12,87,529	28.15	36.68	18.63
Bihar	1,12,37,613	88,39,395	23,98,218	19.94	30.64	8.72
Gujarat	95,55,289	63,63,767	31,91,522	35.79	46.11	24.75
Haryana	26,99,179	20,05,424	6,93,755	26.89	37.29	14.89
Himachal Pradesh	11,05,825	7,63,192	3,42,633	31.96	43.19	20.23
Jammu & Kashmir	8,57,964	6,57,660	2,00,304	18.58	26.75	9.28
Karnataka	92,35,127	62,31,363	30,03,764	31.52	41.62	20.97
Kerala	1,28,98,072	70,54,096	58,43,976	60.42	66.62	54.31
Madhya Pradesh	92,23,081	70,16,649	22,06,432	22.14	32.70	10.92
Maharashtra	1,97,52,608	1,33,31,079	64,21,529	39.18	51.04	26.43
Manipur	3,53,090	2,49,383	1,03,707	32.91	46.04	19.53
Meghalaya	2,98,312	1,77,772	1,20,540	29.49	34.12	24.56
Nagaland	1,41,518	96,681	44,837	27.40	35.02	18.65
Orissa	57,45,399	42,27,806	15,17,593	26.18	38.29	13.92
Punjab	45,62,123	29,34,281	16,27,842	33.67	40.38	25.90
Rajasthan	49,14,293	38,75,435	10,38,858	19.07	28.74	8.46
Sikkim	37,230	28,579	8,651	17.74	25.37	8.90
Tamil Nadu	1,62,56,393	1,07,83,783	54,72,610	39.46	51.78	26.86
Tripura	4,82,082	3,22,017	1,60,065	30.98	40.20	21.19
Uttar Pradesh	1,91,73,970	1,48,12,311	43,61,659	21.70	31.50	10.55
West Bengal	1,47,11,739	1,00,31,891	46,79,848	33.20	42.81	22.42
Union Territories						
Andaman & Nicobar Islands	50,191	36,160	14,031	43.59	51.64	31.11
Arunachal Pradesh	52,791	44,776	8,015	11.29	17.82	3.71
Chandigarh	1,58,371	98,495	59,876	61.56	66.97	54.35
Dadra & Nagar Haveli	11,105	8,188	2,917	14.97	22.15	7.84
Delhi	23,01,605	14,38,268	8,63,537	56.61	63.71	47.75
Goa, Daman and Diu	3,83,864	2,34,178	1,49,686	44.75	54.31	35.09
Lakshadweep	13,889	9,081	4,808	43.66	56.48	30.56
Mizoram	1,78,793	1,03,324	75,469	53.79	60.49	46.71
Pondicherry	2,17,058	1,35,851	81,207	46.02	57.29	34.62

[1]Inclusive of 0-4 age group.



LITERACY IN INDIA
1971
MEN
WOMEN
ALL PERSONS
KERALA
TAMIL NADU
MAHARASHTRA
GUJARAT
MANIPUR
HIMACHAL PRADESH
WEST BENGAL
KARNATAKA
PUNJAB
TRIPURA
ORISSA
HARYANA
ASSAM
NAGALAND
MEGHALAYA
ANDHRA PRADESH
MADHYA PRADESH
UTTAR PRADESH
BIHAR
RAJASTHAN
JAMMU & KASHMIR
SIKKIM
ARUNACHAL PRADESH
DADRA & NAGAR HAVELI
ANDAMAN & NICOBAR ISLANDS
GOA DAMAN & DIU
LAKSHADWEEP
PONDICHERRY
MIZORAM
DELHI
CHANDIGARH
INDIA
0%
15%
30%
45%
60%
70%

RURAL HIGHER EDUCATION

The scheme of Rural Higher Education was launched in 1956 with the object of providing higher education, after the secondary stage, to the rural youth and inculcating in them a spirit of service to the community and sympathy for the rural way of life, besides training them for careers in the rural development programmes of the central and state governments. The National Council for Rural Higher Education advises the central government on the development of rural higher education. At present, 10 rural institutes are functioning at Coimbatore and Gandhigram (Tamil Nadu), Udaipur (Rajasthan), Birouli (Bihar), Bichpuri (Uttar Pradesh), Amravati, Gargoti and Wardha (Maharashtra), Tavanur (Kerala) and Indore (Madhya Pradesh).

Scholarships for Foreign Students

Foreign students are offered scholarships for higher education and training in India under various schemes. Under the General Cultural Scholarship Scheme, the Government awards 180 scholarships every year to the nationals of selected African, Asian and other foreign countries. At present about 700 scholars are studying in different universities and other institutions in India. Scholarships have been awarded in the fields of agriculture, engineering and technology, medicine, pharmacy, arts and humanities. Under a scheme formulated in 1972-73, 100 scholarships were awarded to the nationals of Bangladesh in 1974-75. At present about 140 such students are pursuing their studies in India. Scholarships are also awarded to nationals of those countries with whom India has Cultural Exchange Agreements. Other schemes include Reciprocal Scholarship Scheme, Commonwealth Scholarship/Fellowship Plan-Indian Awards and Technical Co-operation Scheme of the Colombo Plan.

Special English courses are conducred for such foreign students who do not have proficiency in English. Hostel facilities are also provided to the foreign students at the international student houses or centres located in metropolitan cities.

RESEARCH AND TRAINING

The National Council of Educational Research and Training (NCERT) which was established in 1961, assists the union Ministry of Education and Social Welfare in the formulation and implementation of its policies in the field of school education. The Council works in co-operation with state education departments and universities and other institutions for promoting school education. It also maintains close contacts with international organisations. The results of the investigations conducted by the Council are made available to the public through books, journals and other literature. The Council runs four regional Colleges of Education at Ajmer, Bhopal, Bhubaneswar and Mysore. The Council is developing new curricula and syllabi for classes I to XII in the new (10+2+3) pattern of education.

The Council also runs an educational technology centre at New Delhi. It was set up in 1972-73 for making fuller use in education of films, radio, television and new educational techniques such as video and audio recorders, and programmed learning. Educational technology cells have also been set up in Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Orissa and Rajasthan.

Indian Council of Historical Research

The Indian Council of Historical Research, New Delhi, set up in 1972, enunciates and implements a national policy of historical research and encourages scientific writing of history. It acts as a forum for historians for exchange of views. It operates research projects, offers

fellowships and publishes theses, monographs and translated source materials and important history books.

Indian Institute of Advanced Study

The Indian Institute of Advanced Study in Simla was set up in 1965 as a centre for advanced study and research in the humanities, social sciences and natural sciences. Indian and foreign scholars, meet at the Institute and discourse for their mutual benefit. For this purpose it organises seminars and workshops and publishes transactions of the Institute, monographs and occasional papers.

DEVELOPMENT OF HINDI

The central Ministry of Education runs several programmes for the enrichment and spread of Hindi. Among these are: (a) evolution and finalisation of Hindi terminology; (b) preparation of dictionaries; (c) preparation of linguaphone records, language lessons and tapes; and (d) publication of popular books in collaboration with private publishers. For the spread of Hindi, the activities include (i) rendering financial assistance to governments of non-Hindi speaking states for the training and appointment of Hindi teachers in their schools; (ii) encouraging the learning of Hindi on voluntary basis through correspondence courses; (iii) providing financial assistance to voluntary organisations in non-Hindi speaking states for holding Hindi teaching classes; (iv) giving awards to Hindi writers belonging to non-Hindi speaking states; and (v) propagation of Hindi in other countries. Through the Kendriya Hindi Sansthan, Agra, the central government promotes the development of improved methodology for teaching Hindi to non-Hindi speaking students, preparation of suitable teaching materials, and development of improved teaching methods. Through the Central Hindi Directorate, the government runs programmes relating to the publication of Hindi books and their free distribution in non-Hindi speaking states.

MODERN INDIAN LANGUAGES

Under the scheme for the development of modern Indian languages, the central government gives financial assistance to voluntary organisations for bringing out publications like encyclopaedias, dictionaries, books of knowledge and books of scientific interest. Grants are given for holding literary conferences, seminars and exhibitions for the development of Indian languages. Assistance is also given by way of purchasing copies of printed publications. State governments are given special help for the production of university-level books in regional languages. A *Taraqui-e-Urdu* Board has been set up for the production of educative literature in Urdu. A scheme for the publication of such books in Sindhi is also in operation.

The government also provides facilities for the study of languages other than the mother-tongue. For this, the Central Institute of Indian Languages, Mysore, develops improved teaching methodology, prepares teaching materials and trains second language teachers at the Regional Language Centres of the Institute. The Institute also conducts research necessary for this purpose. The study of tribal languages is one of its important functions.

Foreign Languages Institute

The Central Institute of English and Foreign Languages, Hyderabad, trains teachers in the teaching of English and foreign languages, development of teaching methodology and of teaching materials for use by Indian teachers and students of these languages. A regional centre has been set up at Shillong for accelerating its activities in the

eastern region. From July 1973, the Institute is deemed to be a university.

YOUTH SERVICES

The main objectives of the central government's youth policy are to provide opportunities to young people to make constructive contribution to society, fulfil youth aspirations by providing avenues for young people to be actively involved in the national mainstream and enable them to contribute fruitfully in the task of national reconstruction.

Nehru Yuvak Kendras

To mobilise student and non-student youth for constructive nation building activities, youth centres known as Nehru Yuvak Kendras have been established at district headquarters other than metropolitan areas. The activities of these centres include informal education for young people in the age group 15-25 and their participation in creative activities, development of competitive sports, physical education, encouragement of talent in the field of sports, particularly in the rural areas and community service involving youth participation in eradication of illiteracy, health, education and sanitation programmes.

National Service Scheme

The National Service Scheme (NSS), launched in 1969, aims at providing under-graduate students with opportunities for meaningful social service benefiting the community in a variety of fields. Such activities include youth participation in organising literacy classes, constructive development work with a potential of creating community assets, youth involvement in relief operations, slum clearance and organisation of mobile hospital service.

SPORTS AND GAMES

In the field of sports and games, the policy is to broad-base the scope of selection and training of potential talent and sportsmen and to lay the foundation of a mass base for participation of young people through competitive sports. Scholarships are awarded at national and state-levels to talented school boys and non-student youth who excel in national and state level and rural sports competitions.

All India Council of Sports

The All India Council of Sports advises the central government on matters relating to sports, games and physical education. In consultation with the Council, the government provides financial assistance to the National Sports Federations/Associations for purchase of equipment, visits of Indian sports teams abroad and *vice versa*, organisation of national championships and establishment of rural sports centres. Financial assistance is also provided to state sports councils for the construction of stadia and swimming pools, organisation of annual coaching camps and establishment of rural sports centres.

National Sports Organisation

The National Sports Organisation aims at promoting excellence among college students in selected fields of sports and games. To achieve this, the Organisation provides physical facilities in the universities. It also arranges coaches, organises coaching camps and recommends students for sports talent scholarships. The scheme is managed by the Association of Indian Universities and the University Grants Commission.

National Institutes of Sports

There are two national institutes for the development of physical education and sports in the country. The Netaji Subhas National

Institute of Sports, Patiala, conducts courses in different games to train qualified coaches. It has so far trained 2,528 coaches in 13 different games and sports. The Institute also organises regional coaching centres in different states and provides trained coaches at each of the Nehru Yuvak Kendras for spotting talented sportsmen in rural areas and giving them specialised training. It also conducts coaching and training camps for preparing national teams for participation in international meets.

The Lakshmibai National College of Physical Education, Gwalior, provides teacher-training facilities for three-year degree course as well as for post-graduate studies and research in physical education and recreation. It also runs a three-year summer course for in-service personnel leading to the Master of Physical Education Degree. The College has turned out 713 graduates and 117 post-graduates in physical education up to 1974-75.

National Fitness Corps Programme

The National Fitness Corps programme is the only integrated multipurpose programme of physical education at the middle, high and higher secondary school stage. The programme is being implemented by state governments and union territory administrations.

National Physical Efficiency Drive

The National Physical Efficiency Drive was launched in 1959-60 to create a general awareness among the people for attaining higher standards of physical efficiency. Under the scheme physical fitness tests are carried out annually all over the country on specified days at the testing centres. National Awards in Physical Efficiency are given to men and women who reveal proficiency of a very high order. The scheme is being implemented in collaboration with state Education/Sports Department. At the central level, the Lakshmibai College of Physical Education, Gwalior, operates this scheme. Since its inception, over 110 lakh people have participated in the Drive including 9 lakhs in 1973-74.

6 CULTURAL ACTIVITIES

Preservation of the cultural heritage of the country, inculcation of art consciousness among the people and promotion of high standards in the performing and creative arts are some of the objectives of the State policy. In keeping with this, the central and state governments strive for the promotion of art and culture through national and regional academies of art, dance, drama, music and letters. These institutions and the Department of Culture at the centre are helped in their objective by the media of mass communication and voluntary agencies. Apart from this, some eminent persons associated with the fine arts are, from time to time, nominated by the President of India to the Rajya Sabha in recognition of their standing in these fields.

VISUAL ARTS

Painting

Important traditions of Indian painting include the murals of Ajanta, Ellora and other frescoes, the Buddhist palm leaf manuscripts, the Jain texts, the Deccan, the Mughal, the Rajput and the Kangra schools. The Bengal renaissance and the modern trends bring it to the present. While the modern trends in Europe and elsewhere have influenced modern Indian painting, Indian folk art and themes have also been successfully revived and accepted.

Architecture and Sculpture

Till the advent of modern trends, architecture and sculpture in India were inspired mainly through the religious motif. The best examples are the temples, mosques, fortresses, palaces and other monuments which dot the Indian landscape. Massive buildings that have come up after Independence and the city of Chandigarh symbolise the beginning of the modern period of Indian architecture. Contemporary Indian sculptors have contributed to a new awareness of sculpture which suffered a hiatus for a few centuries.

Handicrafts

From coarse carpets to finest muslins, graceful cotton and exquisite silk saris, embroidered shawls, breathtaking creations in metals, unglazed and glazed pottery, fabulous jewellery—heavy tribal or costume or filigree—rugged or delicate woodwork, dolls and puppets are but a few items of the rich and varied expertise of Indian craftsmen. Their main inspiration is tradition handed down the generations. This heritage of tribal and village activity is sustained by providing economic support to the artisans and export promotion. Every year, the best among the craftsmen are honoured by the nation as master craftsmen.

Lalit Kala Akademi

To promote the understanding of Indian art both within and outside the country, the Government of India established the Lalit Kala Akademi (Academy of Arts) in 1954. The Akademi strives to promote this objective through exhibitions and publications. Every year it holds a national exhibition and every three years, the Triennale-India, an international exhibition. The Akademi has brought out a series of monographs on ancient Indian art and published the results of new research in Indian arts in its journals. It also releases large colour reproductions of paintings and has undertaken a programme to copy frescoes and murals in caves, temples, forts and palaces which are in danger of being lost.

The Akademi organises artists' camps, seminars and lectures and gives grants to recognised art organisations in the country. It honours eminent artists by making them Fellows. So far, 12 persons have been conferred Fellowships. Awards are given to artists on the occasion of the national exhibition.

National Gallery of Modern Art

The National Gallery of Modern Art, set up in 1954, now has a collection of over 2,800 works of art, representing various styles, spanning more than a century. Among the distinguished Indian artists whose works are represented at the gallery are Rabindranath Tagore, Abanindranath Tagore, Gaganendranath Tagore, Ravi Varma, Amrita Sher-Gil, N.S. Bendre, Satish Gujral, Akbar Padamsee, J. Swaminathan, Nandlal Bose, Jamini Roy, Sudhir Khastagir, Mohan Samant, D.P. Roy Chowdhury, M.F. Husain and Shanti Dave.

The collection includes sculptures, graphics and paintings by international modern artists like Jacob Epstein, Giorgio de Chirico, Sonia Delaunay, A. Tapies, Se Duk Lee, D.C. Daja and Peter Lubarada.

National Institute of Design

This institute was set up in 1961 at Ahmadabad by the central government in co-operation with the government of Gujarat and the Ford Foundation. It provides service, training and research in the field of designs in graphic arts, architecture and industry.

PERFORMING ARTS

Music

There are two main schools of classical music, namely, Hindustani and Karnatak. Both schools continue to survive mainly through an oral tradition being passed on by the teacher to the disciple and this has led to the existence of family traditions called the *gharanas* and the *sampradayas*.

In recent years there has been a great revival of interest in folk and tribal music which has been brought to the stage in cities. Growing in popularity is another category of music which has come to be known as light music.

The patronage to music is both state-supported and popular. The Sangeet Natak Akademi (National Academy of Music, Dance and Drama), All India Radio, films, voluntary organisations and cultural associations are the main agencies that have brought about a nation-wide awareness and appreciation of music.

Dance

Dance in India has an unbroken tradition of over 2,000 years. Its themes are derived from mythology, legends and classical literature. There are two main divisions of Indian dance, namely, classical and folk. Under classical are those dance-forms which are based on ancient dance-discipline and have rigid rules for presentation. Among the leading forms of classical Indian dance are *Bharata Natyam, Kathakali, Kathak, Manipuri, Odissi* and *Kuchipudi*. *Bharata Natyam* has roots in Tamil Nadu. *Kathakali* is the dance-drama of Kerala. *Kathak* is the principal classical dance of North India and was revitalized as a result of the fusion of Mughal influence with Indian culture. The state of Manipur in the eastern region has contributed a delicate, lyrical style of dance called *Manipuri*. *Odissi*, from Orissa, once practised as a temple dance, is today widely interpreted by artistes. *Kuchipudi* is a dance-drama from Andhra Pradesh. Its themes are culled from the epics, the *Ramayana* and the *Mahabharata*. The folk and tribal dances of India are of numerous patterns.

Both the classical and folk dances of India owe their present popularity to institutions like the Sangeet Natak Akademi and training

institutes and cultural organisations in different parts of the country. To promote the study and training in the different forms of dance and music, the Akademi awards fellowships to scholars, performers and teachers.

Theatre

Theatre in India is as old as her music and dance. The classical theatre survives only in a few parts of the country, and the folk theatre can be seen in its regional variants in practically every linguistic region of the country. There is also the professional theatre, which is mainly urban-oriented. Besides, a rich tradition of puppet theatre is found in various parts of the country. Among the many forms prevalent are the string puppets, rod puppets, glove puppets and leather puppets (shadow theatre).

There are several semi-professional and amateur theatre groups active in many large cities, performing plays in Indian languages and English.

Sangeet Natak Akademi

The Sangeet Natak Akademi (National Academy of Music, Dance and Drama), which was set up in 1953, fosters the development of dance, drama and music. As part of its co-ordinating and promotional activities, it holds competitions, seminars and music festivals, presents awards to outstanding performing artistes, gives grants to institutions of music, dance and drama and extends financial help to traditional teachers and scholarships to students. It subsidises and publishes research works on performing arts.

In view of the many theatrical, musical and dance forms prevalent in the country, the Akademi has set up a special unit for surveying and documenting them. Its disc and tape library has the largest collection of Indian classical, folk and tribal music, and dance and theatre items.

The Akademi has set up three national institutions for imparting training in dance and drama. These are the Kathak Kendra, New Delhi; Jawaharlal Nehru Manipuri Dance Academy, Imphal; and the National School of Drama and Asian Theatre Institute, New Delhi. The Akademi has also been helping in the resurgence of the puppet theatre in the country.

The Akademi operates a scheme under which prizes are awarded to books in various Indian languages and English on music, dance and drama. It honours outstanding performing artistes by making them Fellows and presents annual awards.[1] It holds from time to time a theatre festival in which theatre groups from different parts of the country present their histrionic talent. The Akademi is exploring new avenues of research in music, including acoustics. Researches in the physical acoustics and psychological responses have been carried out both in the Akademi and by outside agencies.

The Akademi has a gallery of musical instruments, *Asavari*, where a large number of classical, folk and tribal musical instruments are on display. *Yavanika*, another gallery, houses a representative collection of fascinating masks, puppets and folk theatre costumes.

Broadcasting

All India Radio (AIR) is the biggest single agency which has brought about an awareness and appreciation of Indian music—light classical, folk, tribal, vocal, instrumental and film—and drama to almost every home in the country. On an average, music constitutes over 42 per cent of the total broadcasting time.

[1] For 1974 awards, see Appendices

The major programmes through which AIR propagates music are the weekly national programmes of music; the weekly programme of classical music by young artistes; the Sunday morning recital and the monthly national programme of regional music (light and folk); the annual music competition to discover young talent and the week-long annual music festival called the Radio Sangeet Sammelan and the organisation of Vadya Vrinda (orchestra). The all-India Vividh Bharati service of AIR broadcasts popular Indian film music. Live broadcasts of major music festivals held in different parts of the country are also put out by AIR. Through its overseas transmissions, AIR seeks to satisfy the cultural needs of Indian nationals abroad. The musical archives of AIR are among the most important collections of music in the country.

Western music is broadcast by a number of radio stations and the transcription and exchange programmes bring to Indian listeners excerpts from the performing arts from many parts of the world.

LITERATURE

Rediscovery of ancient and medieval Indian literature and development of modern literature in the major Indian languages and English mark the literary activities in present day India. A large number of literary periodicals and magazines, literary institutions and All India Radio have given impetus to the growth of modern Indian literature.

Sahitya Akademi

The Sahitya Akademi was set up in New Delhi in 1954 for the development of Indian letters. Some of the main functions of the Akademi are: translation of literary works from one Indian language to another and from non-Indian to Indian languages; publication of works on literary history and criticism, books of reference like bibliographies and biographies and works in Devanagari and other Indian scripts and popularisation of the study of literature amongst the people. The Akademi has regional offices in Bombay, Calcutta and Madras.

An important publication of the Akademi is the *National Bibliography of Indian Literature* (1901-1953), covering books of literary merit in all the major Indian languages and English published in India or written by Indian authors. Four volumes of the *Bibliography* have been brought out. These cover English and all the major Indian languages except Sindhi, Tamil, Telugu and Urdu. The Akademi's publications on 31 March 1975 totalled 772. The Sahitya Akademi publishes a quarterly journal in English, *Indian Literature*, and a half-yearly journal in Sanskrit, entitled *Sanskrit Pratibha.*

The Akademi honours eminent men and women of letters by electing them Fellows. It awards prizes to works of outstanding excellence in English and major Indian languages.[1]

BOOKS

India is one of the leading book publishing countries in the world. There are about 200 large, 2,000 medium and 8,000 small publishers in the country of whom only about 100 large, 200 medium and 2,700 small publishers are active. More than 14,480 titles were published in 1972. During 1973-74 books and publications, including periodicals and journals, valued at Rs. 1.68 crores were exported to about 80 countries, while imports were valued at Rs 6.92 crores, excluding imports through post parcels. The National Book Trust participated in the Book Fairs held in Singapore, Frankfurt, Cairo, Belgrade, Dacca and Manila and the Children's Book Fair in Ankara. Special exhibi-

[1] For awards, see Appendices.

tions of Indian books were organised in Santiago, Guyana, Bangkok and New York.

National Book Development Board

The National Book Development Board which was set up in 1967, is the principal advisory body for the development of the book industry and trade in the context of the overall requirements of the country. The Board was recognised in 1970 and is now proposed to be reconstituted with some additional functions. It has on it representatives of different sectors of book industry, namely, publishers, authors, printers and booksellers as well as various governmental and non-governmental agencies.

National Book Trust

The National Book Trust, set up in 1957, produces and encourages the production of good literature and makes it available at low prices to libraries, educational institutions and the public. Up to 31 March 1975, it had released more than 1,200 titles in English and various Indian languages.

Since 1970, the Trust has been subsidising the publication of university level books in English by Indian authors. Under the *Aadan Pradan* series, it is publishing up to 10 selected books from each of the principal Indian languages. It also organises annual book fairs and regional book exhibitions and writers' camps.

Publications Division

The Publications Division of the union Ministry of Information and Broadcasting produces books, pamphlets, albums and journals to provide the lay reader with information regarding the diverse aspects of national life and culture and the teachings of national leaders. Till April 1975, it had released 4,784 books, pamphlets and pictorial albums in English, Hindi and other Indian languages.

A major project of the Division is the publication of the *Collected Works of Mahatma Gandhi*. So far 58 volumes in English and 56 volumes in Hindi have been published. Nearly 80 volumes are planned to be brought out.

Other Agencies

An important agency of the central government is the Department of Tourism which disseminates information on aspects of Indian culture to people abroad. A large number of titles are also brought out by private agencies. The government provides assistance to voluntary organisations and cultural institutions in publishing books.

Books for Children

Books for children are brought out, among others, by the Children's Book Trust, the National Book Trust, the Publications Division and the National Council of Educational Research and Training.

Educational Resources Centre

A centre to serve as a nucleus of information to the publishing industry and for the documentation and statistical analysis of imported printed materials was set up in July 1972. Called the Raja Rammohan Roy National Educational Resources Centre, it has begun work on a reference collection of university level books produced indigenously as well as the subsidised editions of foreign text books brought out under the union Education Ministry's collaboration programmes with the Governments of Britain, the United States and the Soviet Union. Text-book writers and publishers are welcome to use the facilities available at the Centre to plan fresh publications.

Copyright

The Copyright Act, 1957, which amended and consolidated all previous laws on the subject, came into force on 21 January 1958. A Copyright Board with powers of adjudication and a Copyright Office have been set up under this Act. Since its inception the Copyright Office had registered 12,871 artistic works, 7,010 literary works and 11 cinematograph films till 31 March 1975. Protection under the Act has also been extended to the works by authors in more than 75 countries.

India is a member of the Universal Copyright Convention, the Berne Convention, for the protection of literary and artistic works, convention for the protection of producers of phonograms against unauthorised duplication of their phonograms and the convention establishing the World Intellectual Property Organisation.

LIBRARIES

There are more than 20,000 libraries of all descriptions in the country, including eight libraries attached to institutions declared by Parliament of national importance and over 1,000 specialised libraries attached to the various departments of the central and state governments.

Though the work relating to libraries is a state subject, the central Department of Culture administers a few central libraries and gives financial assistance to voluntary organisations running public libraries. To ensure regulated development of public libraries, legislation has been enacted by the governments of Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu.

Copyright Libraries

Under the Delivery of Books and Newspapers (Public Libraries) Act, 1954, the 'copyright' libraries are entitled to receive a copy of every new book and magazine published in the country. There are three such libraries, namely, National Library, Calcutta (14.5 lakh volumes), Central Library, Bombay (6 lakh volumes) and Connemara Library, Madras (2.5 lakh volumes).

Manuscript Libraries

The manuscript libraries and the libraries of oriental learning which are largely financed by the central government are spread all over the country. In addition, there are over 500 other collections belonging to state governments and private agencies which have hundreds of thousands of manuscripts.

Some of the important manuscript libraries are: Saraswati Mahal Library, Thanjavur, Tamil Nadu; Government Oriental Manuscript Library, Madras; Khuda Baksh Oriental Public Library, Patna; Raza Library, Rampur, Uttar Pradesh; Oriental Research Libraries at Poona, Maharashtra and Vadodara, Gujarat; Sanskrit University Library, Varanasi and Vishèshwaranand Vedic Research Institute Library, Hoshiarpur and Maulana Azad Aligarh Muslim University Library, Aligarh.

Other Libraries

There are also specialised libraries providing facilities to researchers. Prominent among them are at the Indian Council of World Affairs, New Delhi; Indian Statistical Institute, Calcutta; Gokhale Institute, Poona; Theosophical Society, Madras; National Council of Applied Economic Research, Delhi and the Indian Institute of Public Administration, Delhi.

Some other leading libraries are the Delhi Public Library (5 lakh volumes) and the Central Secretariat Library, New Delhi (4 lakh volumes). Apart from these, some of the bigger universities also have sizable collections.

Gazetteers

A Central Gazetteers Unit in the union Ministry of Education and Social Welfare edits the central gazetteer and plans and co-ordinates the work of the state and district gazetteers. So far, three volumes of the Gazetteer of India, namely, 'Country and People', 'History and Culture' and 'Economic Structure and Activities' have been released and more than 225 of the 337 district gazetteers have been revised. Also, 'Who's Who of Indian Martyrs' has been published in three volumes. The first volume includes patriots who were hanged or killed in the Indian freedom struggle after 1857 till 1947 and the second contains the life sketches of those patriots who sacrificed their lives outside the territory of British India, those who lost their lives in the movements for the establishment of responsible governments in the former princely states and martyrs of the liberation movements in the former Portuguese and French possessions in India. The third volume deals with the 1857 martyrs.

FESTIVALS

Indian festivals are as varied in origin as they are large in number. Some of them celebrate the birthdays of national heroes and some others mark the change of seasons or ripening of harvests. Yet others have their origin in religion and in myths and legends. The main festivals of all the important communities in the country are also observed as public holidays. Some of the main festivals common to all India are: Diwali, Dussehra, Holi, Shivaratri, Janmashtami, Ram Navami, Muharram[1], Id-ul-Zuha, Id-ul-Fitr, Id-i-Milad, Christmas, Good Friday, Vaisakhi, Guruparabs, Buddha Jayanti, Mahavir Jayanti and Jamshed Navaroz. The Republic Day on 26 January, the Independence Day on 15 August and the birthday of Mahatma Gandhi on 2 October are observed as national holidays.

ARCHAEOLOGY

All ancient and historical monuments of national importance are the responsibility of the central government, while other ancient and historical monuments are maintained by state governments.

The Archaeological Survey of India (ASI), New Delhi, which was founded in 1861, is concerned with the exploration and excavation of ancient sites and their maintenance and publication of multiform records and reviews. It also conducts a post-graduate diploma course in archaeology.

The ASI has a library which is one of the oldest in the country. It contains rare material not only on India but also on south-east Asia and east Asia. There is a separate library of photographs.

Besides ASI, almost all the state governments have their own archaeological surveys or departments. University departments working in the field of archaeology carry out their research either independently or in co-operation with the state surveys and ASI. A Central Advisory Board of Archaeology co-ordinates the activities of the central and state archaeological surveys and the university research programmes in archaeology.

Museums

The first museum in the country was set up at Calcutta in 1814. At present, there are over 200 museums in India.

[1]Muharram, though not a festival, is included among festivals of India because of its observance with piety and pageantry by a large number of people all over India.

The central government finances and administers a few central museums of art, archaeology, natural history, geology and commemorative and crafts museums, and the Central Advisory Board of Museums provides a forum for the exchange of ideas on various aspects of museums maintained by state governments, universities and private organisations.

Some of the important museums are: Indian Museum, Victoria Memorial Hall, Asutosh Museum, Calcutta; National Museum, National Gallery of Modern Art, Nehru Memorial Museum and Library, New Delhi; Salar Jung Museum, Hyderabad; Prince of Wales Museum, Bombay; Government Museum, Madras, and the University Museum, Varanasi. There are several archaeological museums at ancient sites like Konarak, Nagarjunakonda, Nalanda, Sanchi and Saranath and museums of handicrafts and textile designs and children's museums. A few scientific and technological museums have also been established.

Training facilities for museum personnel at the diploma level are at present provided by the Universities of Aligarh, Vadodara, Calcutta and Varanasi and the Birla Institue of Technology, Pilani. In addition, the central government organises museum camps for in-service training and awards fellowships for training in India and abroad.

INTERNATIONAL CULTURAL RELATIONS

Cultural Agreements

India has cultural agreements with 39 countries. They are: Afghanistan, Arab Republic of Egypt, Argentina, Australia, Bahrain, Bangladesh, Belgium, Brazil, Bulgaria, Colombia, Czechoslovakia, Federal Republic of Germany, France, German Democratic Republic, Greece, Guyana, Hungary, Indonesia, Iran, Iraq, Japan, Republic of Korea, Kuwait, Mauritius, Mongolia, Norway, People's Democratic Republic of Yemen, Philippines, Poland, Rumania, Senegal, Sudan, Tunisia, Turkey, Tanzania, United Arab Emirates, USSR, Yugoslavia and Zambia. Closer cultural relations with some of these countries have found a practical shape in the form of cultural exchange programmes with 16 countries, namely, Afghanistan, Arab Republic of Egypt, Bangladesh, Belgium, Bulgaria, Czechoslovakia, Federal Republic of Germany, France, German Democratic Republic, Hungary, Iran, Mauritius, Mongolia, Poland, Rumania, USSR and Yugoslavia.

Auroville

While the cultural co-operation activities rest mainly with the Department of Culture, union Ministry of Education and Social Welfare, international cultural co-operation programmes are also executed through the Indian National Commission for Co-operation with Unesco. A programme now under way with assistance from the Commission is the 'Auroville' project of Sri Aurobindo Society, Pondicherry, which aims at bringing together the values and ideals of different cultures.

Indian Council for Cultural Relations

The Indian Council for Cultural Relations, New Delhi, established in 1950, strives to promote and strengthen cultural relations and mutual understanding between India and other countries. The Council has regional offices in Bangalore, Bombay, Calcutta and Madras and cultural centres in Suva, Fiji, Georgetown, Guyana and San Francisco, U.S.A.

The main functions of the Council are reciprocal development of studies in Indian and foreign universities, publications in Indian and

foreign languages on different aspects of Indian culture, exchange of cultural material with libraries and museums abroad, establishment of Chairs and centres of Indian studies abroad, exchange of cultural delegations, scholars and artistes and organisation of lectures, seminars and conferences and men of eminence in the field of art and culture. It looks after the welfare of overseas students and for this purpose runs international student hostels at Bombay, Calcutta, Delhi and Madras.

The Council administers the Jawaharlal Nehru Award for the Promotion of Peace and International Understanding, instituted by the Union Government in 1964. Recipients of the Award so far are: U Thant, the late Dr Martin Luther King, Khan Abdul Gaffar Khan, Yehudi Menuhin, Mother Teresa, Dr Kenneth D. Kaunda, Josip Broz Tito, Andre Malraux and Julius Nyerere.

7 SCIENTIFIC RESEARCH

The number of national laboratories has grown from 2 in 1947 to the present 30. There is also a network of more than 200 other laboratories and research institutions. The University Grants Commission has set up a Scientific Research Council to promote research in the universities. The spending on scientific research has gone up from Rs 4.7 crores in 1950-51 to over Rs 300 crores in 1974-75. The S&T component of the Fifth Plan, envisaged in the public sector, will be about Rs 1,570 crores. The electronics component of this S&T plan is to generate a total production potential of Rs 2,600 crores during the Fifth Plan period and provide employment to nearly 2.6 lakh people. These are some indicators of the expanse of science in India and the importance given to scientific research.

Organisationally, despite continuous efforts to reduce the number of co-ordinating points, several bodies have come into being because scientific research has become increasingly diversified and complex. The Atomic Energy Commission and the Department of Atomic Energy are in existence for more than two decades. Similarly, the Council of Scientific and Industrial Research and the Defence Research and Development Organisation have also been functioning for a number of years. More recently, a National Committee on Science and Technology (NCST), backed by an executive central Department of Science and Technology, came into being in 1971. The Space Commission, backed by a Department of Space, was set up in 1972. A little earlier, an Electronics Commission, with a central Department of Electronics was created.

Agricultural research with its long history in India, has now been provided a department through the setting up, towards the end of 1973, of a Department of Agricultural Research and Education. The Indian Council of Medical Research, started in 1911, has under its control several institutions doing studies not only in diseases and treatment but also in various other related branches of fundamental research. Departmental research in aviation, rail and road, forestry, water and power and other fields is conducted by organisations within the administrative control of the concerned ministries and departments.

SCIENCE POLICY

The Government of India's science policy is guided by a resolution adopted by Parliament as early as March 1958. Among its objectives is to secure for the people of the country the benefits from the acquisition of scientific knowledge and its application. The resolution also set out some other aims like encouraging individual initiative for the acquisition and dissemination of knowledge as well as the discovery of new knowledge, fostering programmes to train scientific and technical personnel to fulfil the needs in the fields of science and education, agriculture, industry and defence and ensuring an adequate supply of scientists and recognising their work. All this would help in fostering and sustaining the cultivation of science and scientific research in all its aspects, namely, pure, applied and educational.

EXPENDITURE

Tables 7.1 and 7.2 give an idea of spending on scientific research and development sector-wise and organisation-wise.

TABLE 7.1
EXPENDITURE ON SCIENTIFIC RESEARCH AND DEVELOPMENT

(Rs crores)

	1958-59	1972-73	1973-74	1974-75[1]
Central Government	27.66	195.60	209.64	261.13
State Governments	1.00	10.76	12.87	14.80
Private Sector	0.15	27.82	23.51	27.03
TOTAL	28.81	234.18	246.02	302.96

[1]Provisional.

TABLE 7.2
EXPENDITURE OF MAJOR ORGANISATIONS

(Rs crores)

Name of the Organisation	1972-73	1973-74	1974-75[1]
Department of Atomic Energy	25.16	22.63	33.48
Department of Space	18.23	19.09	30.29
Council of Scientific and Industrial Research	24.66	25.01	32.12
Defence Research and Development Organisation	25.35	31.51	40.16
Indian Council of Medical Research	2.40	3.03	2.55
Indian Council of Agricultural Research	29.91	27.25	29.23

[1]Provisional.

NCST

The National Committee on Science and Technology (NCST) is the apex body to advise the government on all matters relating to planning and promotion of science and technology.

It has prepared a five year Science and Technology Plan and suggested priority areas for the quick achievement of balanced sectoral growth. Its S&T plan for 1974-75 includes recommendations in a number of areas like fuel and power, oil and natural gas, petrochemicals, fertilizers, groundwater, minerals, heavy engineering and machine tools, mining, steel and metallurgy industry and utilisation and recycling of wastes. The plan also has suggestions in the fields of housing, urbanisation and construction technology, transportation, health and family planning and research support, extension and education.

While the S&T component of the Fifth Plan in the central sector will be Rs 1,033.29 crores, there will be an additional non-plan provision of Rs 534.33 crores.

DST

The Department of Science and Technology (DST), set up in 1971, functions as the executive arm of the National Committee on Science and Technology. It co-ordinates all S&T activity in the country including planning and provision of grants to research institutions; holds ministerial responsibilities of such autonomous bodies as the Council of Scientific and Industrial Research (CSIR) and the National Research Development Corporation (NRDC) and looks after bilateral agreements on science and technology with other countries. Scientific Attaches have been appointed at the Indian embassies in Washington, Moscow and Tokyo to establish better liaison in science and technology.

The DST has taken several important steps in furthering R&D orientation and assistance for the industry. These include promotion of indigenous technology and adaptation of modern technologies through in-house R&D efforts in the industry. Till the end of November 1974, as many as 204 R&D establishments in both the public and private sectors were registered with the DST. Some of these units have succeeded in exporting their know-how to foreign countries.

Seventeen state research, development and design committees have been set up jointly by the DST and the Department of Industrial

Development. These committees which started functioning in 1973 to help in solving the problems of the small industries, are now serving the medium sector industries also.

With a view to promoting and strengthening the S&T base in the country, the DST has established regional sophisticated instrumentation centres at the Indian Institute of Technology at Madras and Lucknow.

NRSA

During 1974-75, the Department of Science and Technology set up the National Remote Sensing Agency (NRSA) to co-ordinate the programmes of inventory of natural resources. An outlay of Rs 3.62 crores has been provided for NRSA in the Fifth Plan.

NISSAT

It has also set up a National Information System for Science and Technology (NISSAT). Apart from creating data banks in different sectors, it will train scientists in fields like information acquisition and handling.

CEL

Based fully on indigenous know-how, the DST has set up the Central Electronics Ltd., New Delhi. It will undertake large scale production of sophisticated ferrites, ceramic and other components. One of its objectives is to take indigenous laboratory know-how and do the engineering development of the product.

National Surveys and Other Institutions

The DST has administrative responsibility for the Survey of India, Dehra Dun, which has a photo interpretation unit at Dehra Dun and an R & D wing at Hyderabad; the National Atlas Organisation, Calcutta; the Natural History Museum, New Delhi; the Botanical Survey of India, Calcutta, which has in Calcutta itself four main centres, namely, the Indian Botanical Garden, the Central National Herbarium, the Industrial Section of the Indian Museum and the Central Botanical Laboratory and seven regional circles at Allahabad, Coimbatore, Dehra Dun, Jodhpur, Poona, Port Blair and Shillong; and the Zoological Survey of India, Calcutta, which has regional stations at Dehra Dun, Jabalpur, Jodhpur, Madras, Patna, Poona, Shillong and Solan.

There are several independent institutions doing research with help from the DST. These include the Indian Association for the Cultivation of Science, Calcutta; Bose Research Institute, Calcutta; Raman Research Institute, Bangalore; Birbal Sahni Institute for Palaeobotany, Lucknow and; the Wadia Institute of Himalayan Zoology, Delhi. Grants are given to the Indian National Science Academy, New Delhi and the Indian National Science Congress Association, Calcutta. The DST has also set up a Scientific and Engineering Research Council (SERC) to support research programmes in the field of frontier areas and other entirely new scientific disciplines emerging at the interface of pure and applied science.

Environment

The DST has reconstituted the National Committee on Environmental Planning and Co-ordination, entrusted with a major research work in ecology under Unesco's programme 'Man and Biosphere' (MAB). The projects in which the committee is engaged include environmental and ecological research, human settlements, mass transit and water pollution control.

Under a mass transit programme, the DST has been actively associated with the Delhi Transport Corporation (DTC) in revamping

existing route patterns and in better utilisation of existing transport potential.

ATOMIC ENERGY

The Atomic Energy Commission, set up in August 1948, is responsible for all atomic energy activities in the country. The executive agency responsible for implementing the atomic energy programme is the Department of Atomic Energy which was set up in August 1954.

Large-scale research and development work on the application of atomic energy is done at the Bhabha Atomic Research Centre (BARC) at Trombay, near Bombay. The Centre is the largest single scientific establishment in the country. At present it houses four research reactors: APSARA, a one-megawatt swimming pool type reactor; CIRUS, a 40 mw-reactor built with Canadian collaboration; ZERLINA, a zero energy experimental reactor and PURNIMA, a zero energy fast reactor, and some of the most advanced laboratories and workshops in the world.

Over 350 radioactive products and labelled compounds are prepared at the BARC. Radioisotopes are finding use within the country in applications ranging from industrial radiography to the diagnosis and treatment of diseases. Important applications of radiations being tried out are in disinfesting foodgrains, developing high-yielding, disease-resistant mutants of, among others, rice, wheat, groundnut and jute, preserving perishable foodstuff and sterilising medical products. Some of the radioactive products and associated equipment prepared at the BARC are also being exported. A commercial radiation sterilisation plant at Trombay provides sterilisation service to the medical products industry in the country.

Besides basic research in the nuclear sciences, the BARC is also conducting research in a wide range of other fields including metallurgy, vacuum technology, laser, electronics, agriculture, biology and nuclear medicine. It has developed a number of products and processes during the last 20 years and passed on the technical know-how relating to them to the industry.

In addition to R&D, the Atomic Energy Programme covers a wide range of independent activities undertaken by units under the Department of Atomic Energy situated in different parts of the country. Survey, prospecting and development work relating to uranium, thorium, berylium and columbium-tantalum is carried out by the Atomic Minerals Division with its headquarters at Hyderabad. The Indian Rare Earths Ltd. extracts rare earths, minerals and thorium from the beach sands of South India. The Uranium Corporation of India Ltd. mines and concentrates uranium at Jaduguda in Bihar. A Nuclear Fuel Complex at Hyderabad fabricates fuel elements for nuclear power reactors. The Complex also prepares special materials needed by the electronics industry. Manufacture of electronic instruments and equipment for nuclear as well as non-nuclear uses including commercial TV and computers is undertaken at the Electronics Corporation of India Ltd., Hyderabad. A Variable Energy Cyclotron is being built at Calcutta.

Nuclear Power

The most important peaceful application of atomic energy is the generation of power. Nuclear power made its debut in the country with the commissioning of the 420 mw Tarapur Atomic Power Station in Maharashtra in 1969. Two other stations are under construction: the Rajasthan Atomic Power Station at Rana Pratap Sagar with an installed capacity of 430 mw and the Madras Atomic Power Station

at Kalpakkam with an installed capacity of 470 mw. The first unit of the Rajasthan Atomic Power Station has been in commercial operation since December 1973. The second unit is under construction. The country's fourth nuclear power station is being set up at Narora in Uttar Pradesh.

The Atomic Power Authority, an agency under the Department of Atomic Energy, is responsible for all commercially operating atomic power stations. Presently, it runs the Tarapur Station and looks after the commercial aspects of the Rajasthan Atomic Power Station Unit-I.

The power reactors being constructed at present will use heavy water as moderator. To produce this rare commodity within the country, a heavy water plant is functioning at Nangal. Besides this, four heavy water plants are under construction at Vadodara, Kota, Talcher and Tuticorin.

To keep abreast of developments in nuclear technology, work on advanced reactor concepts, such as the Fast Breeder Reactor, is also being undertaken. Research and development work in the area of fast reactors has commenced at the Reactor Research Centre at Kalpakkam.

Yet another area in which India has made tremendous advance is the technology of underground nuclear explosions developed with the sole objective of using them for civil construction purposes. On 18, May 1974, India successfully conducted its first underground nuclear experiment at Pokhran in Rajasthan.

There is an advanced training programme at the Bhabha Atomic Research Centre where annually around 150 graduate engineers and scientists are given special training in nuclear science and technology and prepared for positions in the various atomic energy establishments in the country. India's nuclear facilities have been made available to a number of developing countries which have sent their scientists for training and research work.

SPACE RESEARCH

The primary aims of the Indian space programme are the application of space science and technology to further national developmental objectives in mass communication and education *via* satellites; the survey and management of natural resources through remote sensing technology from space platforms and the development of space technology with the maximum degree of self-reliance.

The organisation entrusted with the realisation of these aims is the Space Commission backed by the Department of Space, with Bangalore being the headquarters of both. The Chairman of the Space Commission is also Secretary to Government of India in the Department of Space.

The Indian Space Research Organisation (ISRO) is the research and development organisation of the Department of Space. It is responsible for the planning, execution and management of space research activities and space applications programmes of the Department of Space. The ISRO, which also has its headquarters in Bangalore, provides rockets and laboratory facilities to scientists belonging to different organisations in India for conducting approved space science experiments.

Major Establishments

The major Indian establishments in the field of space are described below.

The Vikram Sarabhai Space Centre (VSSC), Trivandrum, serves

as the main research and development centre for space technology. It is engaged in the development of satellites, launch vehicles and sounding rockets including their hardware, electronics instrumentation and propellants. It has also set up ground facilities for testing and launching of rockets. It operates and maintains the Thumba Equatorial Rocket Launching Station, which offers facilities to all members of the UN to investigate problems of meteorology and ionosphere over the geomagnetic equator running close to Thumba.

The Indian Scientific Satellite Project (ISSP) of the Vikram Sarabhai Space Centre is located at Bangalore. The ISSP designed and fabricated India's first satellite 'Aryabhata', named after the famous ancient Indian astronomer and mathematician. The 'Aryabhata' was launched on 19 April 1975 into orbit from a Soviet cosmodrome with the help of a Soviet rocket. The Satellite Launch Vehicle Project, undertaken at the VSSC, is developing a four-stage solid-propellant rocket for placing a satellite of 40 kg into a 400 km orbit. Studies are also in progress for putting a satellite in synchronous equatorial orbit.

The Space Science and Technology Centre (SSTC) of the VSSC is the main research and development laboratory. Solid propellants for the rockets are produced at the Rocket Propellant Plant (RPP) while the rockets and other hardware developed at the SSTC are taken up for manufacture at the Rocket Fabrication Facility (RFF). The Propellant Fuel Complex (PFC) produces special materials required for the processing of propellants.

The SHAR Centre at Sriharikota, Andhra Pradesh, is being developed as a national range for launching large multi-stage sounding rockets as well as satellite launch vehicles developed indigenously. To meet the requirements of launch vehicles, a plant with an annual production capacity of 500 tonnes of solid propellants is being set up. A comprehensive test facility for conducting various ground and high altitude tests of rocket motors and sub-systems is also being set up at Sriharikota.

The Space Applications Centre (SAC), Ahmadabad, is engaged in the planning and execution of the space applications projects of the ISRO. One such important project is the use of satellites for establishing communication with the rural population throughout the country. As part of this project, the ISRO, jointly with All India Radio, began the year-long Satellite Instructional Television Experiment (SITE) from 1 August 1975.

Another important project is the remote sensing of natural resources carried on by the Remote Sensing and Meteorology Division of the SAC. With the help of this Division, the ISRO and the Indian Council of Agricultural Research (ICAR) have undertaken a joint experiment called the Agricultural Resources Inventory Survey Experiment (ARISE) employing remote sensing technique to assess crops.

The SAC operates the Experimental Satellite Communication Earth Station (ESCES), Ahmadabad, which is an international centre for training in satellite communications technology.

The Physical Research Laboratory, Ahmadabad, has been the cradle of space science and technology in India and is being developed further as a national centre. Various universities and academic institutions in the country are also identified and encouraged to undertake development tasks relating to space science and technology.

ELECTRONICS The Electronics Commission and the Department of Electronics have their headquarters in New Delhi. The Chairman of the Commission is also Secretary to Government of India in the Department of Electronics. While the Commission is responsible for a rapid, self-reliant and balanced growth of electronics in the country, the Department is concerned with various regulatory and promotional measures. A public sector undertaking called the Electronics Trade and Technology Development Corporation to promote development of foreign trade in electronics has been set up in New Delhi.

An integrated five year plan for electronics drawn up by the Commission is likely to generate, during the Fifth Plan period, a production potential of Rs 2,600 crores and job opportunities for about 2.6 lakh people. The Commission has set up a technology development council to identify areas of intensive research and development, assign relative priorities, finance, evaluate and monitor research and development efforts and help the transfer of the new know-how to production centres. A sum of Rs 20 crores has been allocated for technology development work.

Since different agencies in the country are engaged in the area of electronics, a national advisory committee was set up by the Commission in 1973 for exchange of ideas and information among them. A defence electronics committee ensures that defence requirements are taken care of in the planning of electronics development.

The Commission has an Information, Planning and Analysis Group with cells in Bombay, Calcutta and Madras. This Group is in charge of developing computerised information systems and long range aspects of analysis and policy planning. The Group has been publishing from October 1973 a monthly journal, *Electronics—Information and Planning.*

Computers Considerable emphasis is being placed on developing an indigenous computer capability. For this purpose, a development programme has been financed at the Electronics Corporation of India Ltd. (ECIL),Hyderabad. Apart from this, as part of an extensive scheme of installation of large computer facilities in different regions of the country, a National Centre for Software Development and Computer Techniques (NCSDCT) has been established at the Tata Institute of Fundamental Research, Bombay.

Radars The National Radar Council, set up in 1974, functions under the overall guidance of the Electronics Commission. Its tasks include the preparation of a technology plan to meet the short and long term requirements of radars, both defence and civil; formulation, as part of the technology plan, an integrated programme of R&D, including futuristic aspects and promotion and co-ordination needed to implement the programme.

NRDC The National Research Development Corporation of India (NRDC), New Delhi, a public sector undertaking of the Central Government set up in 1953, acts as a link between research and industry . It is also entrusted with the task of promotion of inventive talent in the country. In 1974-75, it signed 256 licensing agreements for releasing various processes to industry. The activities which the NRDC itself undertakes in any application of indigenous know-how in collaboration with industry have been intensified during recent years.

The NRDC is making efforts on the horizontal transfer of tech-

nology, that is, transfer of proven technology available with one industry to another, eliminating repetitive import of technology. The Corporation has also succeeded in contracting for export of technology from India.

The NRDC brings out two monthly journals, one in English, *Invention Intelligence* and the other in Hindi, *Awishkar*, besides a quarterly list of new processes.

CSIR

The Council of Scientific and Industrial Research (CSIR) with its network of laboratories and research institutions is a major instrument of scientific and industrial research under State auspices and supports research in universities and other centres of learning.

The Council administers the "Scientists Pool", introduced in 1958, to provide temporary placement to well qualified Indian scientists, engineers and medical personnel returning from abroad, and later extended to highly qualified Indian scientists who had not been abroad. The number of Pool Officers working at the end of 1974 was 491. The CSIR also maintains a register of scientists and technical personnel in the country.

The Council has launched a scheme to facilitate CSIR scientists, technologists and engineers to set up industries based on CSIR knowhow. Thirteen scientist-entrepreneurs availed themselves of the facilities under the scheme in 1974.

The Council has adopted Chandrapur district, Maharashtra, for intensive and integrated development through the application of science and technology.

Eight to ten per cent of the annual budget of the CSIR is earmarked for research schemes and fellowships as support to universities and other academic institutions. The research schemes in progress in these institutions numbered 503 and there were 550 research fellows attached to these schemes in 1974. Besides, 3,351 *ad hoc* research fellows selected by the CSIR were also pursuing research in various institutions. Under the 'Emeritus Scientists' scheme, 28 superannuated scientists continued their work in 1974.

The CSIR earned about Rs 60 lakhs in 1974 from premia, royalty, consultation, testing and other services, supply of project reports and sale of products of pilot plants.

From 1957, the Council is administering the Shanti Swarup Bhatnagar Memorial Awards in physical, chemical, biological, medical, engineering and geological sciences and mathematics.

National Laboratories

The laboratories run by the CSIR are grouped into six distinct disciplines.

Physical and Earth Sciences

The national laboratories coming under the physical and earth sciences group are: the National Physical Laboratory, New Delhi (estd. 1950), which has designed and developed Sodar—an instrument for the location and measurement of thermal and velocity in homogeneities in atmosphere; the Central Electronics Engineering Research Institute, Pilani (estd. 1953; extension centres at Madras and New Delhi), which has developed special purpose vacuum tubes required in radar systems: the Central Scientific Instruments Organisation, Chandigarh (estd. 1959; service and maintenance centres at Bombay, Calcutta, Madras and New Delhi), which has developed high-voltage regulated power supply, cardiac monitor, and foetus stethoscope; the National Geophysical Research Institute, Hyderabad (estd. 1961), which has

developed, for the first time, a national facility for carrying out air-borne geophysical surveys for minerals; and the National Institute of Oceanography, Panaji (estd. 1966; regional centres at Bombay and Cochin), which is engaged in the studies of the seas around India with a view to making judicious use of their resources.

Chemical Sciences The national laboratories under the chemical sciences group are: the National Chemical Laboratory, Poona (estd. 1950), which has developed processes based on which the commercial production of direct current recording polarygraph, direct reading spectrophotometer, thermosetting resins for industrial laminates and medium-grade nitrile rubber has been undertaken; the Central Electrochemical Research Institute, Karaikudi (estd. 1953; field stations at Madras and Mandapam), which has developed process know-how for aluminium alloy anodes for cathodic protection, mercury oxide batteries (wet type) and luminescent grade zinc sulphide; the Central Salt and Marine Chemicals Research Institute, Bhavnagar (estd. 1954; field station at Mandapam), which has developed reverse osmosis and electrodialysis plants for desalination of brackish waters; the Regional Research Laboratory, Hyderabad (taken over in 1956), which has provided the process know-how and basic engineering data for the setting up of a commercial low-temperature carbonization (LTC) plant in Andhra Pradesh; the Regional Research Laboratory, Jorhat (estd. 1959; experimental farms at Imphal, Mokokchung and Shillong), which has made a study on the development programmes of Arunachal Pradesh, Assam, Manipur, Nagaland, Mizoram, Meghalaya and Tripura and identified areas where the CSIR laboratories could participate; the Indian Institute of Petroleum, Dehra Dun (estd. 1959; field stations at Jawahar Nagar and New Delhi) ,which has evaluated crude oils from Basrah (Iraq) and Bombay High in order to provide basic data for processing these crudes in Indian refineries.

Biological Sciences The national laboratories under the biological sciences group are: the Central Food Technological Research Institute, Mysore (estd. 1950; experimental stations at Anantharajupet, Bombay, Lucknow, Ludhiana, Mangalore, Nagpur and Trichur), which has developed an 'energy food' based on wheat flour, groundnut flour, Bengal gram flour and jaggery and fortified with vitamins and minerals; the Central Drug Research Institute, Lucknow (estd. 1951), which has developed 8-hydroxyquinoline, an essential drug intermediate and 'Centsquare', a contraceptive whose large-scale production technology has been standardised by an industrial research institute of Delhi in collaboration with Hindustan Latex Ltd; the Central Leather Research Institute, Madras (estd. 1953; extension centres at Bombay, Calcutta, Jullundur, Kanpur and Rajkot), which has developed "ladder-link" compounds for production of softy leathers; the National Botanical Gardens, Lucknow (taken over in 1953; research station at Banthra), which has developed an indigenous substitute for clove oil; the Indian Institute of Experimental Medicine, Calcutta (taken over in 1956), which has developed a process for the production of fungal acid protease for use as a bating agent; the Regional Research Laboratory, Jammu (taken over in 1957; field stations at Chatha, Palampur, Srinagar and Varinag), which in collaboration with the Geological Survey of India has successfully utilised geothermal energy for refining crude borax and sulphur, the Central Indian Medicinal Plants Organisation, Lucknow (estd. 1959; two zonal centres

at Bangalore and Jammu-Tawi and four commercial centres at Bangalore, Haldwani, Jammu and Srinagar), which is providing aromatic and medicinal plant products to the pharmaceutical and perfumery industries; the Industrial Toxicology Research Centre, Lucknow (estd. 1965), which studies the harmful effects of industrial toxins for developing preventive measures.

Engineering Sciences

The national laboratories under the engineering group are: the Central Fuel Research Institute, Dhanbad (estd. 1950), which carries out physical and chemical surveys of Indian coals through seven stations at Bilaspur, Jammu, Jealgora, Jorhat, Nagpur, Namkum and Raniganj; the Central Glass and Ceramic Research Institute, Calcutta (estd. 1950), which has developed laser glass (neodynium type) needed by the Defence for making range finders; the National Metallurgical Laboratory, Jamshedpur (estd. 1950; regional stations at Ahmadabad, Batala, Howrah and Madras), which has developed know-how for aluminizing malleable cast iron besides studying the feasibility of commercial production of sponge iron (30,000 tonnes per annum); the Central Road Research Institute, New Delhi (estd. 1952), which has carried out a technical appraisal of rural roads all over India; the Central Building Research Institute, Roorkee (estd. 1953; field station at Calcutta and extension cells at Ahmadabad and Bhopal), which has developed a process of making diaphragm walls besides developing clay-fly ash building bricks and sulphate-resisting puzzolanic slag cement suitable for making concrete for marine structures; the Central Mechanical Engineering Research Institute, Durgapur (estd. 1958; R&D centres at Ludhiana, Madras and Poona), which has developed a 12-tonne friction welding machine, automatic bottle washing machine and a wool carding machine; the Central Mining Research Station, Dhanbad (estd. 1956), whose work includes mine safety, design of equipment used in mining and development of mining machinery; the National Environmental Engineering Research Institute, formerly known as CPHERI, Nagpur (estd. 1958; zonal laboratories at Ahmadabad, Bombay, Calcutta, Delhi, Hyderabad, Jaipur, Kanpur and Madras), which carries out research in sanitation, disposal of sewage and industrial wastes, industrial hygiene and pollution; the National Aeronautical Laboratory, Bangalore (estd. 1959), which has designed and fabricated fibre-reinforced plastics radomes for radar installations; the Structural Engineering Research Centre, Roorkee (estd. 1965; regional centre at Madras), which does research in specialized designs and structural problems connected with buildings, bridges and other structures; the Regional Research Laboratory, Bhubaneswar (estd. 1964), which has developed garbage gas plant and refractory-grade thermal insulation bricks from fly ash.

CECON

The Civil Engineering Consultancy Service (CECON) was set up by the CSIR in 1975. Its constituent units are: the Central Building Research Institute, Roorkee; the Structural Engineering Research Centre, Roorkee; the National Environmental Engineering Research Institute, Nagpur; the Central Road Research Institute, New Delhi, the Cement Research Institute, New Delhi and the National Botanical Gardens, Lucknow.

The CECON, which functions from the premises of the Central Road Research Institute, New Delhi, provides international consultancy services in civil engineering, particularly to developing countries.

Information Sciences

The Publications & Information Directorate (PID), New Delhi (estd. 1951), and the Indian National Scientific Documentation Centre (INSDOC), New Delhi (estd. 1952), of the CSIR are engaged in dissemination of scientific and technical information. The PID brings out encyclopaedic volumes on raw materials resources and industrial products under the general title 'Wealth of India' and nine scientific research periodicals besides other publications on scientific and technical information. In 1974, Part VIII of the Wealth of India: Industrial Products, covering the alphabetical sequence Si-Ti, was brought out. The INSDOC provides documentation and translation services and maintains a National Science Library. It also publishes *Indian Science Abstracts* and *Annals of Library Science and Documentation* and compiles a series of catalogues which list the holdings of specialised libraries and establishments. During the year 1974, a 'Directory of Scientific Research in Indian Universities—1974' was brought out.

The CSIR also maintains two science museums. The Birla Industrial and Technological Museum, Calcutta, has eleven galleries depicting a chronological history of science and technology through working models, animated exhibits, diagrams and illustrated charts. The Visvesvaraya Industrial and Technological Museum (VITM), Bangalore, arranges workshops, mobile exhibitions, demonstration lectures, science fairs and seminars to depict advancement in science and technology, and has galleries on electrotechnic, motive power, timber and paper and popular science.

Fibre Technology

There are at present ten industrial research associations working under the auspices of the CSIR. Six associations conduct research in fibre technology. They are: Ahmadabad Textile Industry's Research Association, Ahmadabad; the Bombay Textile Research Association, Bombay; the South India Textile Research Association, Coimbatore; the Silk and Art Silk Mills Research Association, Bombay; the Indian Jute Industries Research Association, Calcutta and the Wool Research Association, Bombay.

Other associations are: the Tea Research Association, Calcutta; the Indian Plywood Industries Research Institute, Bangalore; the Cement Research Institute of India, Ballabhgarh; and the Automotive Research Association of India. The research associations undertake on behalf of the member firms not only basic and applied research germane to the problems of industry but also carry out market surveys. consumer trials, quality control and operational research.

AGRICULTURAL RESEARCH

The Indian Council of Agricultural Research (ICAR), set up in 1929, is the apex body to plan, undertake, promote and co-ordinate agricultural and animal husbandry plans including research, education and field application. The Council gives support for the setting up and development of at least one agricultural university in each state. A Department of Agricultural Research and Education in the union Ministry of Agriculture and Irrigation provides administrative support to the ICAR and co-ordinates the work of central and state agencies. The Director General of ICAR is also Secretary to Government of India in the Department of Agricultural Research and Education.

The ICAR functions through a network of research laboratories, a Directorate of All-India Soil and Land Use Survey, agricultural universities, all-India co-ordinated projects and a few other institutions. In 1974-75, 52 co-ordinated projects were in progress for research in

different aspects of crop and soil sciences, agronomy and engineering, and animal sciences.

An important project in progress is the All-India Co-ordinated Project in Dry Land Agriculture. Twenty-four research centres are trying to evolve a new technology to improve the output in dryland conditions.

Significant increases in per acre yields and more scientific use of land and water leading to crop planning based on ecology-*cum*-economics and better yield of export crops are some of the Fifth Plan objectives motivating agricultural research.

MEDICAL RESEARCH

Medical research in India is largely done through the Indian Council of Medical Research (ICMR), New Delhi, through a network of research institutes and centres covering a wide spectrum. The ICMR, set up in 1911, has seven permanent research institutions and centres, namely, the National Institute of Nutrition, Hyderabad; Virus Research Centre, Poona; Tuberculosis Chemotherapy Centre, Madras; Cholera Research Centre, Calcutta; Indian Registry of Pathology, New Delhi; National Institute of Occupational Health, Ahmadabad; and the Institute for Research in Reproduction, Bombay.

There are two statutory bodies to conduct research in various branches of medical sciences. They are the All-India Institute of Medical Sciences, New Delhi, and the Post-Graduate Institute of Medical Education and Research, Chandigarh. There is also an All-India Institute of Speech and Hearing at Mysore which has been functioning under the union Ministry of Health and Family Planning since 1965. Clinical facilities are available at all these institutes.

Study of Diseases and Treatment

Some of the institutions doing work in particular branches of medicine and treatment are the Indian Cancer Research Centre, Bombay, Cancer Institute, Madras, and the Chittaranjan Cancer Research Centre, Calcutta, besides the cancer wing being developed at Safdarjang Hospital, New Delhi, as a regional institution for cancer; the National Tuberculosis Institute, Bangalore, Vallabhbhai Patel Chest Institute, Delhi, where research in chest ailments including tuberculosis is done; Central Leprosy Teaching and Research Institute, Chingleput, which trains medical and para-medical personnel, treats leprosy patients and is recognised as a WHO regional centre for certain investigations in leprosy; the National Institute of Communicable Diseases, Delhi (previously known as the Malaria Institute of India, established in 1909), which plans, guides and evaluates the National Filaria Control Programme and which has been designated as a WHO reference centre; and the School of Tropical Medicine, Calcutta.

The All-India Institute of Hygiene and Public Health, Calcutta, set up in 1932, imparts post-graduate training, besides doing research. The Rural Health Unit and Training Centre, Singur, and the Urban Health Centre, Chetla, are attached to this Institute. Biological and chemical assays of drugs are carried out at the Central Drugs Laboratory, Calcutta, which also maintains a herbarium and gives technical advice to drug manufacturers.

Micro-biology and Related Studies

The Central Research Institute, Kasauli, is the central laboratory for all biological products and for the collection and distribution of bacterial type culture and international standards of toxins and anti-toxins. It is also the national centre for salmonella and escherichia group of organisms and for influenza. Problems of micro-biology, virology

immunology and bio-chemistry are covered by the investigations at the Institute. The Pasteur Institute, Coonoor, does research in rabies, influenza, other respiratory virus infections, diseases caused by intestinal viruses like polio, coxsackie and ectto group and smallpox, and bacterial diseases like enteric fevers and syphilis. It is also engaged in the production of anti-rabies vaccine and oral polio-myelitis vaccine. It serves as the international reference centre of WHO on rabies. The King Institute of Preventive Medicine, Guindy, Madras, gives post-graduate training in micro-biology, makes and supplies prophylactic vaccines, freeze-dried smallpox vaccine; anti-tetanus sera, tetanus toxoid, blood products, and intravenous and special solutions of various kinds. It also undertakes public health bacteriological investigations. The Haffkine Institute, Bombay, established in 1896, does research in bacteriology, experimental medicine, chemotherapy, pharmacology, pathophysiology, biochemistry, immuno-haematology, immunology and virology related to communicable and other diseases. It also undertakes drugs analysis and biological standardization. It trains scientists for post-graduate degree and provides public health laboratory services by way of diagnosis of diseases and epidemiological investigations. It manufactures some bacterial and viral vaccines, anti-toxins and other biologicals including human plasma products.

DEFENCE RESEARCH

The Defence Research and Development Organisation (DRDO), set up in 1958 by amalgamating some of the technical development establishments of the Defence Science Organisation, has now under its control 32 research and development establishments and laboratories covering, among others, armaments, engineering, vehicles, propellants, electronics, aeronautics, rockets and missiles, metallic and non-metallic materials and composites, naval technology, high altitude and food research. The budget and manpower of the DRDO has progressively increased since its inception and particularly since 1962-63. The estimated expenditure for 1974-75 is over Rs 40 crores against Rs 1.5 crores in 1958-59. The DRDO maintains close liaison with scientific and technological activity within the country and abroad. About a thousand research and development projects are in progress in the various divisions of the Organisation. It has set up a systems analysis group for aeronautics at Bangalore and is giving particular attention to increasing expertise in naval research and radar technology. A special group has also been set up for research in rocket and missile technology.

DEPARTMENTAL RESEARCH

A number of other government departments remain responsible for certain branches of research. Some of them are described below.

Geology

The Geological Survey of India (GSI) with its headquarters at Calcutta was established more than 120 years ago. Besides conducting geological, geochemical and geophysical surveys and studies of environmental geology, including geotechnical surveys, it does research in new techniques in exploration and fundamental research in geology, geochemistry and allied fields. Results of these studies are disseminated through maps and publications of the GSI which functions through 6 regional offices, 29 circle offices and 22 specialised divisions.

Hydraulic and Power Research

The Central Water and Power Research Station at Khadakvasla near Poona, the premier hydraulic research station in India, is recognised by the Economic and Social Commission for Asia and the Pacific

(ESCAP) as its regional laboratory. There are 10 other hydraulic research stations in the country. The Central Board of Irrigation and Power supervises and co-ordinates the work done by the various irrigation and power research stations on problems of river valley projects, power stations and transmission systems.

The Central Power Research Institute, set up in 1960 for research in problems of generation, transmission and distribution of energy, has two units, one at Bangalore and the other at Bhopal.

Meteorology

The India Meteorological Department, organised on an all-India basis in 1875, is the national agency for providing services in the field of meteorology. Meteorological data are collected from 979 observatories of different types and processed. The Department, along with the Indian Institute of Tropical Meteorology (IITM), Poona, conducts fundamental and applied research in various aspects of meteorology like weather forecasting, climatology, agricultural meteorology, hydrology and instrumentation. Research is also done in seismology. The Indian Institute of Astrophysics, Kodaikanal, and the Indian Institute of Geomagnetism, Bombay, have been constituted as autonomous institutes along with IITM.

Broadcasting

The research department of All India Radio investigates problems having a direct bearing on and utility to sound broadcasting and television. Its work includes study of propagation of radio waves in LF, MF, HF and VHF bands, studio acoustics and acoustic materials, transducers and tape recording. The design and development division is engaged in designing sound and TV equipment and receivers, FM transmitters and receivers, aerials and measuring instruments with stress on import substitution. The proto-type and production section produces a limited quantity of equipment for use in AIR network. The know-how of a Distortion and Noise Level Meter (DNL) and a solid state portable receiver developed by the research department has been passed on to the ECIL for commercial exploitation. The department also undertakes study of problems for international bodies like CCIR and ABU.

Telecommunication

The Posts and Telegraphs Department has a telecommunication research centre (TRC) located at New Delhi. It is engaged in the design and development, for indigenous manufacture, of all types of communication equipment and systems needed for the expansion and improvement of the telecommunication network of the country. From its inception 19 years ago and up to 1974-75, total production was placed at Rs 80 crores, of which the saving in foreign exchange was nearly Rs 60 crores.

Anthropology

The work of the Anthropological Survey of India, with headquarters at Calcutta, includes social, psychological, economic, linguistic, physical and genetic investigations. Its regional stations are located at Dehra Dun, Mysore, Nagpur, Port Blair and Shillong. An Anthropological Museum has also been set up at Jagdalpur in Madhya Pradesh.

Aviation

The Department of Civil Aviation has a Directorate of Research and Development concerned with design and air-worthiness of civil aircraft and equipment, aircraft performance testing, development of indigenous aircraft materials, design and manufacture of prototype of

gliders and light training aircraft, selection of suitable aircraft types for civil operations and safety in air operations.

The Institute of Aviation Medicine, Bangalore, set up in 1957 by the IAF, deals with human problems relating to aircrew and flight safety and carries out research and medical evaluation.

The Research, Designs and Standards Organisation, Lucknow, the Indian Roads Congress, New Delhi and the Forest Research Institute, Dehra Dun, conduct research with a bearing on railways, roads and timber respectively.

8 HEALTH

Over two decades of planned development has resulted in vastly improved health facilities. The number of doctors and hospital beds has increased by more than two and a half times and that of nurses by more than five times. In rural areas, there were 5,288 primary health centres in December 1974 whereas none existed before 1951. Epidemics like malaria, TB, smallpox, cholera and plague, which took a heavy toll of life, are no longer great killers. The death rate has come down from 27.4 per thousand in 1949-50 to 14.9 per thousand in 1971 and life expectancy at birth has increased from 32 years to 50 years. But it has also resulted in 51.8 per cent rise in population during this period. To check this growth rate, the family planning programme was launched as an official programme in 1952. So far 1.65 crore couples in the reproductive age group have been protected and 2.06 crore births have been averted.

Public health is primarily the responsibility of the state governments. The central government, however, sponsors and supports major schemes for improving the health of the people. The agency which carries out this task is the Ministry of Health and Family Planning. The Central Council of Health advises the ministry on policies and programmes in all their aspects.

Objectives

The broad objectives of the health programmes are to control and eradicate communicable diseases, to provide curative and preventive health services in rural areas through the establishment of a primary health centre in each community development block and to augment programmes for the training of medical and para-medical personnel. In the Fourth Plan, sub-divisional and district hospitals were strengthened to serve as referal centres for the primary health centres.

In the Fifth Plan, the aim is to provide minimum public health facilities integrated with family planning and nutrition for vulnerable groups—children, pregnant women and lactating mothers. The accent will be on (i) increasing the accessibility of health services to rural areas, (ii) correcting the regional imbalance, (iii) intensification of the control and eradication of communicable diseases, especially malaria and smallpox, (iv) qualitative improvement in the education and training of health personnel, and (v) development of referal services by providing specialists in the upgraded primary health centres in rural areas and by removing the deficiencies in the district and sub-divisional hospitals.

In the first three Five Year Plans and the three Annual Plans, the total outlay on various health programmes was Rs 602.27 crores. The expenditure on major programmes in the Fourth Plan and the outlay for the Fifth Plan and for 1974-75 are shown in Table 8.1.

ERADICATION AND CONTROL OF DISEASES

To eradicate and control major communicable diseases, a number of national programmes are in operation. These include national eradication programmes for malaria and smallpox and national control programmes for filaria, leprosy, trachoma, TB, VD and cholera. In the Fourth Plan, these received 100 per cent assistance from the central government. During the Fifth Plan, programmes relating to malaria, smallpox and leprosy will continue to get 100 per cent financial

assistance from the centre, while expenditure on programmes concerning filaria, TB, VD, trachoma and cholera will be shared between the centre and the states.

TABLE 8.1 EXPENDITURE IN THE FOURTH PLAN AND OUTLAY FOR THE FIFTH PLAN

(*Rs crores*)

Programme	Anticipated expenditure (1969-74)	Fifth Plan outlay	Annual Plan 1974-75
Minimum Needs Programme ..	34.27	291.47	23.74
Medical education and research ..	78.74	94.56	11.61
Training programmes ..	7.25	17.20	1.14
Control of communicable diseases ..	99.26	168.61	26.56
Hospitals and dispensaries ..	82.66	155.28	12.90
Indigenous systems of medicine and homoeopathy	15.09	28.07	2.65
Other programmes ..	26.64	40.81	3.90
TOTAL ..	343.91	796.00	82.50

Malaria

Malaria took a toll of seven lakh lives in the post-partition period. A Malaria Control Programme was, therefore, launched in 1953. In 1958 it was converted into National Malaria Eradication Programme. It succeeded in reducing the incidence from 7.5 crores in the post-partition period to only 1.5 lakhs in 1965. Further, there were no deaths due to malaria in 1965. But the situation thereafter deteriorated year after year. The positive incidence of malaria increased from 1.48 lakhs in 1966 to 24.82 lakhs in 1974. This was due partly to vector mosquitoes having developed resistance to DDT and partly to ineffective supervisory services. Besides, during 1974-75 a worldwide shortage of insecticides was also felt. The Government of India is now trying to remedy the situation.

Training of personnel in methods of malaria eradication is given at the National Institute of Communicable Diseases, Delhi, and the regional co-ordinating organisations at Bangalore, Bhubaneswar, Hyderabad, Lucknow, Shillong and Vadodara.

Smallpox

Smallpox was another great killer before 1947. So the National Smallpox Eradication Programme was launched in 1962 with emphasis on intensive primary vaccination campaign and revaccination of vulnerable groups of population. Consequently, the incidence of smallpox declined continuously and the disease was largely contained. Of late, however, there has been a rising trend in the figures of incidence. This can partly be ascribed to intensive search for smallpox cases carried out throughout the country followed by containment of the detected outbreaks. As a result, 1,88,000 cases with 31,262 deaths were reported in 1974 as against 88,110 cases with 15,434 deaths in 1973. In 1974, 2.12 crore primary vaccinations and 8.55 crore revaccinations were performed.

Leprosy

The National Leprosy Control Programme has been operating since 1955. The number of people exposed to leprosy risk is about 37.2 crores, of which 16.6 crores have been covered so far. The estimated leprosy cases are about 32 lakhs, of which about 8 lakhs are infectious. Another 12.5 lakh cases have been recorded and are being given treatment by 278 leprosy control units, 2,240 SET (survey, education and treatment) centres, 40 voluntary agencies and 8 international organisations. Besides, 40 urban leprosy centres, 14 temporary hospitalisation wards and 39 reconstructive surgery units for prevention of deformities of hands, feet and face are functioning in the country.

It is proposed to set up 47 leprosy control units, 927 SET centres, 117 urban leprosy centres, 27 reconstructive surgery units, 40 temporary hospitalisation wards and 3 training centres during 1975-76 under National Leprosy Control Programme at an estimated cost of Rs two crores.

Training of medical and non-medical personnel is conducted by 18 government training centres, 7 voluntary training centres and the Central Leprosy Teaching and Research Institute, Chingleput (Tamil Nadu), which also conducts research. The Leprosy Advisory Committee advises the union government on the implementation of the programme.

Filaria

The National Filaria Control Programme has been in operation since 1955. It is estimated that 13.6 crore people are exposed to the risk of filariasis with 80 lakhs having manifestation of the disease and 1.2 crores with filarial parasites in their blood.

Activities under the programme are at present confined only to anti-larval operations in urban areas where 142 filaria control units provide protection to 1.6 crore persons. Besides, 12 Headquarters Bureaux are also functioning at the state level. So far, only 145 out of 260 districts in the endemic states have been surveyed. During the Fifth Plan, 32 survey units would be set up for delimitation of the problem in the remaining 115 districts. Of these six have been established in Uttar Pradesh. In addition, 59 filaria control units and 480 clinics would also be established.

Training in filariology is given at the three Regional Filaria Training and Research Centres at Calicut (Kerala), Rajahmundry (Andhra Pradesh) and Varanasi (Uttar Pradesh).

Tuberculosis

Nearly 5 lakh people died of TB every year in the post-partition period. The BCG Vaccination Programme was started in 1949. About 25.21 crore persons had been tuberculin tested and 18.58 crore persons vaccinated till April 1975. Vaccination of new borns in maternity institutions is being gradually expanded. Estimates indicate that there are about 80 lakh radiologically active TB cases, of which nearly 20 lakhs are infectious. Nearly 600 clinics have been set up, of which 298 have been upgraded as District TB Centres to undertake district-wise TB Control Programme. Nearly 40,000 beds are available for in-patient treatment. Seventeen centres provide training facilities to the medical and para-medical personnel in different parts of the country. The National TB Institute, Bangalore, conducts re-orientation courses for medical and para-medical personnel from different states for the implementation of the district TB programme. The Institute also carries out operational research in the field of tuberculosis. Steps are also being taken to increase the production of BCG vaccine to meet increased requirements.

The Tuberculosis Association of India, which is the largest voluntary organisation, also assists in combating the disease. More than 200 State and District TB Associations all over the country provide assistance in anti-TB activities.

Venereal Diseases

At present, 307 clinics for venereal diseases are functioning in the country. Training facilities in VD control are available at the Training Centre, Safdarjang Hospital, New Delhi, and the Institute of Venereology, Government General Hospital, Madras. A second VDRL

Antigen production unit at Calcutta and a mobile VD unit at Delhi have also started functioning.

Trachoma

The National Trachoma Control Programme, which was started in 1963, is in operation in Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Punjab, Rajasthan, Uttar Pradesh, Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Delhi, Goa, Daman and Diu and Mizoram. During 1975-76, the programme would be extended to Arunachal Pradesh, Lakshadweep, Pondicherry and Tripura.

Till March 1975, about 14.9 crore people in 1,805 blocks and primary health centres had been covered under the programme.

Cancer

At present 50 general hospitals offer facilities for cancer treatment by surgery, radio therapy and chemotherapy. Research into problems of cancer is conducted at 16 hospitals and institutes situated in various parts of the country. It is proposed to upgrade some of the existing cancer institutions to regional cancer centres for undertaking more intensive cancer research.

The Indian Council of Medical Research has started collaborative studies on oral, cervical and breast cancer at various centres in the country.

The Arignar Anna Memorial Cancer Institute, Kancheepuram was started in March 1969 in collaboration with the WHO and the Government of India as the cancer control pilot project to evaluate the development of a cancer control programme based on applicable systems of early detection and effective treatment on the basis of available facilities in the state or the area.

MEDICAL RELIEF AND SERVICE

Medical relief and service is primarily provided by state governments. Certain charitable voluntary and private institutions also provide medical relief. The number of beds in hospitals in 1973-74 was 3,03,000 as compared to 1,13,000 in 1956-57. In the rural areas, there were 5,288 primary health centres at the end of 1974 as against 725 in March 1956. The number of doctors and nurses during 1973-74 was estimated at 1,38,000 and 88,000 respectively.

A provision of Rs 82.50 crores has been made for health programmes for the annual plan 1974-75. For allocation, see Table 8.1.

Central Government Health Scheme

The Central Government Health Scheme was launched in July 1954 for central government employees and their families in Delhi and New Delhi. Now it also covers Allahabad, Bombay, Calcutta, Kanpur, Madras, Meerut and Nagpur. Central government pensioners and widows of central government employees, who are getting family pension, are also eligible for the scheme. The staff and families of certain autonomous and semi-government organisations in Delhi, members of Parliament and Delhi police employees and their families are also covered by it. In certain selected areas in Delhi, the scheme has been extended to the public on payment of prescribed charges.

The total number of families covered by the scheme was about 2.97 lakhs in 1974-75 accounting for about 12.45 lakh beneficiaries.

Primary Health Centres

The primary health centre forms the base of the integrated structure of medical services in the rural areas. At the end of December 1974, 5,288 centres were functioning in the country. Of these over 1,290

are planned to be upgraded to 30-bed rural hospitals in the Fifth Plan. They will provide specialist treatment and better diagnostic facilities. The primary health centres and sub-centres will also provide basic medical care to the community through multi-purpose health workers. One basic health worker is appointed for a population of 10,000. This service has been extended to about 2,900 primary health centres.

INDIGENOUS SYSTEMS OF MEDICINE

A large number of people in India, especially in the villages, make use of indigenous systems of medicine. They consult hereditary vaidyas and hakims who practise medicine as a family profession. About 2.5 lakh registered practitioners are practising these systems. In addition, 13,000 dispensaries and 200 hospitals are also functioning. To evolve a uniform standard of education in Indian systems of medicine, the Central Council of Indian Medicine was set up in 1971. The Council has finalised uniform syllabi for under-graudate education in Ayurveda, Siddha and Unani. The Council will also maintain an all-India register of qualified practitioners of Indian systems. Boards have also been set up in majority of the states for the regulation of practice in the Indian systems of medicine. It has also been decided to establish a National Institute of Ayurveda at Jaipur and a National Institute of Homoeopathy at Calcutta.

Under-graduate Education

There are 92 Ayurvedic, 15 Unani and one Siddha under-graduate colleges in the country. To ensure a requisite standard of education, the central government gives financial assistance to these institutions run by voluntary organisations for non-recurring expenditure such as the construction of college buildings and essential equipment up to a maximum of Rs 5 lakhs per institution.

Post-graduate Education

Post-graduate education in Indian systems is imparted by the Gujarat Ayurvedic University, Jamnagar and the Post-graduate Training and Research Institute at the Banaras Hindu University. Besides, 13 departments of Ayurveda, 2 Unani and 2 Siddha have been upgraded for post-graduate education and research. Four more departments are proposed to be upgraded in the Fifth Plan.

Homoeopathy

There are 74 institutions imparting training in homoeopathy which have been recognised by various State Boards and Councils. Six of these are government institutions. The Homoeopathic Advisory Committee advises the central government on the development of homoeopathy.

The Homoeopathic Pharmacopoeia Committee has brought out the first volume of the Homoeopathic Pharmacopoeia of India and the second volume has been finalised.

Under the Homoeopathic Central Council Act, 1973, a Central Council of Homoeopathy was set up on 8 August 1974. It will determine the minimum standards of homoeopathic education throughout India and will maintain a central register of homoeopathic practitioners.

Nature Cure

The Nature Cure Advisory Committee in the union Ministry of Health and Family Planning is responsible for the development of nature cure. The central government gives grants to nature cure research and educational institutes.

Research

The Central Council for Research in Indian Medicine and Homoeopathy, established in 1969, is responsible for initiating, conducting and

co-ordinating scientific research in different aspects—fundamental and applied—of the Indian systems of medicine and Homoeopathy and Yoga. The Council has five scientific advisory boards, one each for Ayurveda, Siddha, Unani, Homoeopathy and Yoga. It has undertaken collection and identification of medicinal plants, drug standardisation and clinical research. There are 5 Central Research Institutions, 7 Regional Research Institutes, 3 Regional Research Centres and 120 research units under the Council functioning in different states.

CONTROL AND MANUFACTURE OF DRUGS

The Drugs and Cosmetics Act regulates the import, manufacture, sale and distribution of drugs and cosmetics in the country. Under the Act, the import, manufacture and sale of sub-standard, adulterated or misbranded drugs is prohibited. The union government is empowered to check the quality of imported drugs, co-ordinate the activities of the states, lay down regulatory measures and standards of drugs and grant approval for import or manufacture of new drugs. The control over the quality of drugs which are manufactured, sold and distributed in the country is exercised by the state governments. Zonal offices of the Central Drugs Standard Control Organisation functioning at Bombay, Calcutta, Ghaziabad and Madras maintain close liaison with the state organisations for enforcement of the provisions of the Drugs and Cosmetics Act. The Central Drugs Standard Control Organisation arranges training programmes for personnel concerned with Drugs Standard Control.

The Central Drugs Laboratory, Calcutta, functions as the testing laboratory for imported drugs as well as the appellate laboratory under the Drugs and Cosmetics Act to test samples of drugs sent to it by courts. The Central India Pharmacopoeia Laboratory, Ghaziabad, tests samples of non-biological drugs and draws up standards of drugs included in the Indian Pharmacopoeia.

Prices of Drugs

The prices of drugs (excluding Ayurvedic, Unani and Homoeopathic medicines) are regulated by the Drugs Price Control Order, 1970 which prescribes a formula for retail selling price of drugs. Prior approval of the government is necessary for revising the prices of the existing drugs or for fixing the prices of new introductions. On the recommendations of a working group the government has fixed the selling prices of 23 important bulk drugs and gelatine capsules. No retailer can sell any formulation to a customer at a price exceeding the retail price of that formulation as displayed on the label or the price list, whichever is less.

Vaccine Manufacture

The BCG Vaccine Laboratory, Guindy, Madras, is one of the largest vaccine producing laboratories in the world. It supplies biologicals (PPD, Tuberculin, freeze dried BCG vaccine and freeze dried liquid vaccine) on payment basis out of the grants paid to the states and union territories by the centre.

The Central Research Institute, Kasauli, supplies vaccine for TAB, cholera, rabies, influenza, antivenom sera and tetanus toxoid.

The Haffkine Institute at Bombay manufactures vaccines, antitoxins and other biologicals.

Objectionable Advertisements

The Drugs and Magic Remedies (Objectionable Advertisements) Act, 1955 prohibits the publication of objectionable advertisements relating to sexual stimulants, alleged magic cures for venereal diseases

and diseases peculiar to women. The Act, amended in 1963, also controls the import and export of objectionable advertisements in liaison with the customs and postal authorities who can intercept articles suspected to contain objectionable advertisements.

Medical Depots and Factories

The Medical Stores Organisation, with six units at Bombay, Calcutta, Gauhati, Hyderabad, Karnal and Madras procures and ensures supply of quality medical stores and equipment to about 20,000 indenting hospitals and dispensaries all over the country at the most economical rates. It also receives supplies from international agencies like UNICEF and WHO and distributes them to the beneficiaries. It also arranges relief supplies to the victims of natural calamities in the affected areas.

At the factories of the organisation at Bombay and Madras, a large number of drugs and dressings are manufactured to meet the requirements of civil medical store depots.

HEALTH EDUCATION

The Central Health Education Bureau, which was set up in 1956, co-ordinates and promotes health education through various national and state health programmes. The main activities of the Bureau, which has six technical divisions, are to interpret the policies and programmes of the Ministry of Health and Family Planning; to train key health and community welfare workers in health education and research methods ; to evolve effective methodology and tools of training; to prepare and distribute 'type' health education materials to states and other agencies; to render technical and other assistance to official and non-official agencies engaged in health education work; to develop health education syllabi for different age groups of school children and teacher training courses at various levels; and to co-operate and collaborate with international agencies in promoting health education activities.

The Bureau publishes three monthly journals in English and Hindi to focus attention on major public health problems. It also organises exhibitions on health and family planning and allied topics. The Bureau, since 1973, is developing materials on health programmes for telecast through the Satellite Instructional Television Experiment (SITE).

It also deals with health education requirements of National Health Programmes and development of health education bureaus in the states and union territories. So far, sixteen states and three union territories have set up health education bureaus. Seventy-two district health education units have also been set up.

MEDICAL EDUCATION, TRAINING AND RESEARCH

To promote medical education, 105 medical colleges, as against 30 in 1950-51, 15 dental colleges and 11 other institutions are functioning in the country. Establishment of new medical colleges and expansion of the existing ones have raised admission capacity from 2,500 in 1950-51 to over 12,500 in 1973-74. The doctor-population ratio, which was 1 : 5,150 in 1968, has improved to 1 : 4,200 (provisional) by 1975.

Training of Nurses

Facilities for the training of nurses exist in all major hospitals and in Colleges of Nursing at Ahmadabad, Bangalore, Bombay, Chandigarh, Hyderabad, Indore, Kanpur, Madras, New Delhi, Poona, Trivandrum and Vellore. State governments and non-official organisations also organise auxiliary nurse-midwife courses with help from the centre.

There are 633 nursing and health schools and colleges for training

of nurses, auxiliary nurses/midwives and health visitors. The number of students who qualify from these institutions is 5,700, 5,400 and 600 per annum respectively.

Research

The Indian Council of Medical Research initiates, develops and co-ordinates medical research in the country. It is financed mainly by the Government of India. The Council maintains, besides a number of semi-permanent units, seven permanent research institutes and centres, namely, the National Institute of Nutrition, Hyderabad, Virus Research Centre, Poona, TB Chemotherapy Centre, Madras, Cholera Research Centre, Calcutta, Indian Registry of Pathology New Delhi, National Institute of Occupational Health, Ahmadabad and the Institute for Research in Reproduction, Bombay. The activities of the Council cover a wide spectrum. For details, see chapter 'Scientific Research.'

NUTRITION AND PREVENTION OF FOOD ADULTERATION

Surveys conducted in different parts of the country have revealed that under-nutrition and malnutrition are prevalent in large sections of the population. State Nutrition Divisions have been, therefore, set up in 16 states and 2 union territories in their Health Directorates. These Divisions assess the incidence of nutritional deficiency in various groups of population, conduct nutrition education campaigns and supervise supplementary feeding programmes. The most affected segment is the vulnerable population consisting of young children and expectant mothers. To protect their health, various nutrition programmes have been launched by the Ministries of Health and Family Planning, Agriculture and Education and Social Welfare. Important among them are the School Meal Programme for primary school children and the Special Nutrition Feeding Programme for pre-school children in city slums and tribal areas in different states. The number of beneficiaries covered by the two schemes up to the end of the Fourth Plan was about 1.6 crores. It is proposed to cover one crore more beneficiaries under these schemes during the Fifth Plan. In the Fifth Plan, both schemes have been brought under the state sector and included in the minimum needs nutrition programme. In rural areas the population is encouraged and educated for the production and consumption of nutritious foods under the Applied Nutrition Programme. (See chapter 'Rural Development'). Other measures include supply of concentrated doses of Vitamin A to children to control blindness among them, supply of tablets containing iron and folic acid to expectant mothers and pre-school children to control anaemia and supply of iodized salt to control goitre. About 7.5 crore people were covered under these schemes in the Fourth Plan.

Modern Bakeries

The Modern Bakeries (India) Ltd., New Delhi, a public sector undertaking, was set up in 1965 to provide hygienically prepared, enriched and fortified bread to consumers and to children covered by the supplementary feeding programme. It has units at nine places.

Prevention of Food Adulteration

The Prevention of Food Adulteration Act, 1954 is in force throughout the country. The food laws are implemented by local bodies except in a few states where they are enforced by the state Food and Drugs Administration. These provide for deterrent punishment to offenders and prohibit the manufacture, import or sale of adulterated food articles. An amending act which came into operation on 1 March 1965, provides for the appointment of food inspectors and public

analysts by the Government of India. A squad of 8 food inspectors, one senior food inspector and one prosecutor has been established at the Directorate-General of Health Services to investigate cases of food adulteration at the inter-state level. The Central Food Laboratory, Calcutta, functions as an appellate laboratory for cases referred to by the courts and also carries out investigations to standardise methods of analysis. It also arranges refresher courses for food analysts. Another Food Research and Standardisation Laboratory has been set up at Ghaziabad.

Water Supply and Sanitation

The National Water Supply and Sanitation Programme was launched in 1954 as part of the Health Plan to assist the states in their urban and rural water supply and sanitation schemes so as to provide adequate water supply and sanitation facilities in the entire country. A Central Public Health and Environmental Engineering Organisation (CPHEEO) was also set up in 1954 to provide technical advice and guidance to state governments in the preparation and execution of their schemes. The programme and the organisation were transferred to the union Ministry of Works and Housing in February 1973. By March 1975, 1,685 towns had been provided with water supply benefiting a population of 9.25 crores (about 84 per cent of the total urban population). Also, 195 towns with a population of four crores (36 per cent of the total urban population) had been covered by partial sewerage system. Of the 5.76 lakh villages, about 49,000 with a total population of 2.60 crores had been provided with pipe water supply and hand pump tube wells up to March 1975. Of the remaining villages, about 4.24 lakhs have some kind of water supply like conserved wells and springs but in about 1.03 lakh villages water is not available within a depth of 15 metres or a distance of 1.6 km. The Fifth Plan makes an allocation of Rs 564.23 crores for this purpose under the Minimum Needs Programme. This is in addition to Rs 440 crores earmarked for urban water supply and sewerage. Apart from the programmes in the state sector, CPHEEO administers six central programmes which have a total provision of Rs 16.60 crores in the Fifth Plan.

FAMILY PLANNING

Family Planning as an official programme was adopted in 1952 as it was recognised that a rapidly growing population would be more a hinderance than of help in raising the standard of living of the people. During the First and Second Five Year Plans (1951-1961), family planning programme was taken up in a modest way with a clinical approach. The stress was mainly on research in the field of motivation, communication, demography, physiology of reproduction and on the extension of central and state organisations in providing clinical services. The programme was reorganised in the Third Plan after the publication of the 1961 census results which showed a higher growth rate than anticipated. The clinical approach was supplemented by extension approach under which the message, services and supplies of contraceptives were taken to the people. A full-fledged Department of Family Planning was created in 1966 in the Ministry of Health, Family Planning and Urban Development. During the three Annual Plans (1966-69) the family planning programme, which was described as the 'kingpin' of the Plan, was made time bound and target oriented with vastly increased funds. In the Fourth Plan, the programme was accorded the 'highest priority'. In the Fifth Plan also the pro-

gramme will get highest priority and will continue as a centrally-sponsored programme up to 1983-84. The approach during the Fifth Plan will be to increasingly integrate family planning services with those for health, maternal and child care and nutrition. The family planning workers will thus be converted into multi-purpose workers who will be able to pay special attention to purveying family planning motivation and services.

A sum of Rs 516 crores has been provided for this programme during the Fifth Plan as against an expenditure of Rs 14 lakhs in the First Plan, Rs 2.16 crores in the Second Plan, Rs 24.86 crores in the Third Plan, Rs 70.46 crores in the three Annual Plans and Rs 284.43 crores in the Fourth Plan.

Aims and Targets

The programme aims at reducing the annual birth rate from about 39 per thousand in 1969 to 30 by the end of the Fifth Plan and 25 by 1983-84. The operational goal is to protect about 4 crore couples in the reproductive age group by any method of family planning. So far, 1.65 crore couples in the reproductive age group have been covered which form over 16 per cent of the couples with wives in the reproductive age group.

Implementation Machinery

The programme is implemented through the state governments for which cent per cent central assistance is provided. In rural areas, the programme will be further extended through the Minimum Needs Programme so as to reach the remotest areas. The scheme envisages (a) one primary health centre for each community development block; (b) one sub-centre for a population of 10,000; (c) making up the backlog and deficiencies in buildings, staff and equipment; (d) provision of drugs at the enhanced level of Rs 12,000 per annum per primary health centre and Rs 2,000 per annum per sub-centre; and (e) upgrading one out of every four primary health centres to a 30-bed rural hospital.

The Central Family Planning Council advises on family planning at the national level. A number of central committees, like the Research Co-ordination Committee, have been set up to study the progress of research programmes.

Voluntary organisations and private medical practitioners are also associated to make the maximum use of available resources for optimum results. At present, 1,975 urban centres and 5,132 rural centres are functioning in the country along with 33,370 sub-centres.

Contraceptives

Sterilizations and IUD

The number of couples using conventional contraceptives has been estimated at 24.3 lakhs. Sterilization services and IUD are also becoming popular. During 1974-75, 13.28 lakh persons were sterilized and 4.18 lakh insertions were carried out. Since 1952, a total of 162.50 lakh sterilizations and 54.37 lakh IUD insertions had been done up to March 1975 giving a rate of 27.3 and 9.1 per 1,000 population respectively. These services are offered both through mobile and static units.

Nirodh

Nirodh (condom) is presently distributed all over the country through three schemes namely, Free Supply Scheme, Depot Holder Scheme and Commercial Distribution Scheme.

Nirodh and other conventional contraceptives are distributed free to interested couples under the Free Supply Scheme through family planning centres and sub-centres numbering about 40,000.

In addition, family planning field workers also distribute conventional contraceptives free during their field visits. Under the Depot Holder Scheme, Nirodh is sold through selected rural post offices at 5 paise for 3 pieces. The total free distribution of Nirodh during 1974-75 was about 11 crore pieces. Under the Commercial Distribution Scheme, six of the country's largest and most experienced consumer goods marketing companies and one public sector company are selling Nirodh through their regular network of salesmen, distributors, wholesalers and retailers At present about 2.5 lakh retailers are selling Nirodh. The sales of Nirodh under this scheme have increased from 1.57 crore pieces during 1968-69 to 6.4 crore pieces in 1974-75.

Oral Contraceptives

The oral pill programme, introduced in 1967, now extends to 2,092 urban family planning and primary health centres. Up to March 1975, 18,726 women were continuing with this method.

Medical Termination of Pregnancy

The Medical Termination of Pregnancy Act came into force from 1 April 1972. It extends to the whole of India, except Jammu and Kashmir, and provides for the termination of certain pregnancies by registered medical practitioners in well-equipped institutions. So far 1,249 government and private institutions have been approved in various states and union territories for this purpose. There were about 1.64 lakh terminations up to March 1975.

Post-partum Programme

To propagate the message of family planning among women attending hospitals for delivery and abortion, a Post-partum Programme was started in 1969-70 in 59 selected hospitals. The number of such hospitals has now increased to 255 which includes many district hospitals.

Training

The Fifth Plan envisages the conversion of health and family planning workers into multipurpose workers. The new training programme has started in Andhra Pradesh, Haryana, Karnataka, Kerala, Maharashtra, Punjab and Uttar Pradesh. Seven central training institutes train, among others, district level officers, medical officers, block health assistants and trainers. Under the scheme 2,860 people received training in 1974-75.

Motivation and Education

The family planning programme in India depends on its voluntary acceptance by the people. To approach 10 crore literate and illiterate couples in the reproductive age group, living in urban and remote rural areas, a broad based Mass Education and Motivation Programme has been launched. Besides mass media like the Press, the Films, the Radio and the TV, oral and visual communication media like song and drama troupes and inter-personal communication through a network of extension education workers are being used on an extensive scale. Population education is also being introduced in school curricula. Out-of-school-adults are also being educated through the functional literacy classes. Co-operation and assistance of all official and non-official agencies working in the field of development like trade unions, co-operatives, Panchayats and other local institutions are also enlisted for promoting the programme. The Mass Mailing Unit of the Department of Family Planning disseminates information in the form of printed materials (including booklets, folders and journals) to various categories of opinion leaders through direct mail service. The list includes over 10 lakh addresses.

Research and Evaluation

To obtain maximum results within the financial and physical resources allocated to the programme, research is being conducted in the field of demography, communication action, reproductive biology and fertility control. In the field of demography and communication action, 12 Demographic and/or Communication Action Research Centres are functioning, besides the National Institute of Family Planning, New Delhi and the International Institute for Population Studies, Bombay. These centres carry out studies on various aspects of family planning and population growth. The latter also imparts training in demography to both Indian and foreign students. Various universities and institutions such as the Operational Research Group, Vadodara, the Population Council of India and the Indian Institute of Management, Calcutta are conducting surveys and studies for assessing the characteristics of acceptors and fertility of the population.

Bio-medical research in the field of reproductive biology and fertility control is conducted at the Indian Council of Medical Research, New Delhi, the Central Drug Research Institute, Lucknow and the Central Council for Research in Indian Medicine and Homoeopathy.

As a result of family planning work done up to March 1975, 12.4 per cent of the 10.22 crore eligible couples (with wives in the age-group 15-44) have been protected by sterilization, 1.4 per cent by IUD and 2.4 per cent by conventional contraceptives. The result of these efforts has been that an estimated 2.06 crore births have been averted by 31 March 1975.

9 SOCIAL WELFARE

The Directive Principles of State Policy, as enshrined in the Constitution, have a bearing on social welfare. They enjoin the State to ensure that 'the health and strength of workers, men and women, and the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocations unsuited to their age and strength', and that 'childhood and youth are protected against exploitation and against moral and material abandonment.'

The social welfare services in the last two decades have sought to serve the development and rehabilitation needs of the weaker sections of society, especially the physically and socially handicapped and women and children from the vulnerable sections of the community in rural and tribal areas and urban slums.

EXPENDITURE ON WELFARE PROGRAMMES

The expenditure on social welfare programmes since the beginning of the First Plan is given in Table 9.1.

TABLE 9.1
EXPENDITURE ON SOCIAL WELFARE

(*Rs crores*)

	First Plan	Second Plan	Third Plan	1966-69 Annual Plans	Fourth Plan
Centre	1.60	8.49	12.84	7.76	65.71
States	—	4.95	5.63	3.20	9.67
Union Territories	—	—	0.93	0.60	1.43
TOTAL	1.60	13.44	19.40	11.56	76.81

Fifth Plan Outlay

The Fifth Plan outlay on social welfare programmes under major heads for the centre and centrally-sponsored programmes for states and union territories is given in Table 9.2.

SOCIAL WELFARE ORGANISATIONS

Department of Social Welfare

The union Department of Social Welfare, created in 1964, is responsible largely for three important vulnerable groups, *i.e.*, women, children and the physically, mentally and socially handicapped. In the Fifth Plan, special stress will be laid on child development and rehabilitation of the physically and mentally handicapped, particularly on promoting their employment.

Central Social Welfare Board

The Central Social Welfare Board (CSWB), set up in 1953, was registered as a company under the Companies Act on 1 April 1969. The chairman of the Board is appointed by the Government of India from amongst prominent women social workers. Among its main activities are survey of the needs of social welfare organisations, evaluation of their programmes and co-ordination of the assistance given by various central ministries and state governments and render financial assistance to voluntary welfare agencies. The Board also promotes the development of voluntary organisations in areas where they do not exist as well as social welfare activities for the welfare of the family, women, children, the handicapped and assistance in cases of unemployment, under-employment, old age, sickness, disablement and other cases of undeserved want.

TABLE 9.2
FIFTH PLAN OUTLAY UNDER MAJOR HEADS

(*Rs crores*)

Head	Outlay
Centre	
Family and child welfare	3.20
Integrated child development services	140.00
Services for children in need of care and protection	5.00
Functional literacy	8.00
Condensed courses of education for employment and vocational training of adult women	4.00
Socio-economic programmes	4.00
Hostels for working women	5.00
National institutes for the handicapped	3.65
Scholarships, research, training, employment, grant-in-aid to voluntary organisations	5.35
Integrated education for handicapped	1.50
Employment service for handicapped	0.50
National Institute of Social Defence	0.25
National Institute of Public Co-operation and Child Development	0.65
Social work, education and training	6.70
Planning, research, evaluation and monitoring	0.50
Grant-in-aid to voluntary organisations by Central Social Welfare Board and strengthening its field organisation	8.00
Grant-in-aid to voluntary organisations	3.50
Educational work for prohibition	0.20
TOTAL (Centre and centrally-sponsored)	200.00
States and Union Territories	30.72
GRAND TOTAL	230.72[1]

[1]Tentative

Note: The Budget estimates for 1975-76 are Rs 10.60 crores.

State Social Welfare Advisory Boards

Social Welfare Advisory Boards have been set up in all the states and union territories, except Lakshadweep and Chandigarh, to act as the counterparts of CSWB at the state level. They serve as the media for exchange of information between the field and the centre and co-ordinate the welfare activities of the state governments and CSWB to avoid duplication. A major portion of the financial assistance from the CSWB is extended to voluntary institutions through the state boards.

Voluntary Organisations

There are now 6,000 voluntary organisations as compared to 2,186 in 1953. The Central Social Welfare Board spent a sum of Rs 39.23 crores on voluntary institutions between 1953 and 1975. It is estimated that about 12 lakh women and children derived benefit from various activities aided by the Board during 1974-75. The grant-in-aid is extended to registered voluntary institutions working for the welfare of women, children, the handicapped, the aged and the infirm. It is also extended for medical and social services and welfare services for non-student youth. Services for cure of leprosy and TB patients and services for correctional and non-correctional institutions also get this aid. These grants are given either for one year or five years. The latter type of grants are given generally to institutions of reputed standing. During 1974-75 grants amounting to Rs 54.95 lakhs were sanctioned for 3,942 welfare institutions.

WELFARE PROGRAMMES

The various programmes of social welfare fall broadly under six heads, namely, programmes for women, programmes for children, composite programmes for women and children, schemes for maladjusted groups, programmes for physically handicapped persons and social legislation.

Welfare of Women

Committee on Status of Women

The Committee on Status of Women in India, set up in 1971, submitted its report to the Government of India on 1 January 1975. The Report of the Committee has been forwarded to concerned ministries and departments for necessary action. The Department has asked the state governments to intensify their existing programmes and take up new programmes for the welfare of women. It is proposed to prepare a national plan of action for women's welfare on the basis of the committee's recommendations.

The Department has also constituted an Inter-Departmental Coordination Committee on Women's Welfare to ensure systematic communication, consultation and coordination among the various ministries and departments. The functions of the Committee at the state level include reviewing the progress in the implementation of various constitutional provisions and special laws intended to safeguard the interests of women, suggesting ways and means of removing defects in implementation, and bringing about coordination among various departmental programmes.

Vocational Training for Adult Women

The scheme introduced in 1975 aims at providing opportunities for needy and deserving adult women to undergo intensive training in selected vocations. Some of the vocational courses are: secretarial courses, radio and television mechanics, tailoring, nursery school teachers' training, Balsevika training, lady health visitors, family planning workers' training and library science.

Condensed Course of Education for Adult Women

The scheme of Condensed Course of Education for Adult Women was started by the Central Social Welfare Board in 1958 for opening new vistas of employment to deserving and needy women and for creating a band of competent trained workers such as primary school teachers, Balsevikas, nurses, health visitors, *dais* and family planning workers.

Under the scheme, women in the age group 18-30, who have had some schooling, are prepared for middle school, matriculation or equivalent examination within two years. The total number of courses organised from 1958 to March 1975 was 1,576 and the total expenditure incurred about Rs 3.42 crores. These courses enrolled nearly 37,785 women. The programme has been extended to the families of Jawans killed or permanently disabled in action. During 1974-75, 186 courses were in progress and 4,600 women were trained. A sum of Rs. 26.52 lakhs was granted to the state boards on this account.

Mahila Mandals

Mahila Mandals are women's organisations running welfare programmes in rural areas. The CSWB gives grants up to 75 per cent of their expenditure. During 1974-75, 433 Mahila Mandals were given grants amounting to Rs 40.15 lakhs for conducting activities in 1,165 centres.

Working Women's Hostels

To provide accommodation at reasonable rates to working girls in urban areas, the CSWB has sponsored the setting up of working women's hostels. The Board gives grants to voluntary institutions running hostels for working women of lower and middle income groups. During 1974-75, 38 such hostels received Rs 91,778 from the Board.

Border Area Projects

Welfare services in the border areas of the country have been strengthened with the setting up of welfare centres in the border areas of Arunachal Pradesh, Leh in Jammu and Kashmir, Lahul and Kinnaur

in Himachal Pradesh, Chamoli, Uttar Kashi and Pithoragarh in Uttar Pradesh, Kutch and Banaskantha in Gujarat and Srikaranapur and Jaisalmer in Rajasthan. These centres provide maternity services, infant care, craft training and social education for women. The expenditure on them is shared in the ratio of 2:1 by the Central Social Welfare Board and the respective state governments. There are at present 118 centres in border areas. A sum of Rs 7.39 lakhs was released to 28 border area projects functioning during 1974-75.

International Women's Year

In pursuance of United Nations General Assembly Resolution, the Government of India decided to join other countries of the world in observing 1975 as the International Women's Year and constituted a National Committee which finalised the programme for the year. The highlights of this programme were: issue of a commemorative postage stamp; observance of All India Women's Day; distribution of educative material among educational institutions and Panchayati Raj institutions, holding exhibitions, organising essay competitions, seminars and conventions.

The Department is bringing out monthly newsletters from March, 1975 highlighting the programmes of celebrations undertaken at the central, state and voluntary level and news from other countries. The Department has also brought out a compendium of programmes of women entitled 'Women in India'.

Programmes for Children

Nutrition Programmes

To meet the widespread nutritional deficiency among children, especially those belonging to the lower economic strata, the Government of India introduced the Special Nutrition Programme in 1970-71 to provide supplementary nutrition to children of 0–3 years of age in the tribal areas and urban slums (in towns with more than one lakh population). The programme was extended in 1972-73 to cover children up to 6 years of age as well as expectant and nursing mothers. About 38 lakh beneficiaries, including over 3 lakh expectant and nursing mothers in 28,119 feeding centres in urban slums and tribal areas, were provided supplementary nutrition under the programme by the end of the Fourth Plan. The programme is functioning in all the states and union territories.

Besides the regular programme, supplementary feeding was extended, as a temporary measure, towards the latter part of 1972-73 to about 2 lakh beneficiaries and during the first half of 1973-74 to 3 lakh beneficiaries in some of the drought and flood affected areas.

In addition to the Special Nutrition Programme, the Department of Social Welfare started another programme in 1970-71 through Balwadis run by voluntary institutions, under which children betbeen 3 and 6 years were provided supplementary nutrition. By the end of the Fourth Plan, about 2.25 lakh children were covered under this programme in over 6,000 Balwadis.

Both these programmes were operated in the central sector during the Fourth Five Year Plan. The Special Nutrition Programme was implemented through the state governments and union territories and the Balwadis Nutrition Programme through the Central Social Welfare Board, the Indian Council for Child Welfare, the Bharatiya Adimjati Sevak Sangh and the Harijan Sevak Sangh. In the Fifth Five Year Plan, the programme of supplementary feeding of pre-school children and expectant and nursing mothers has been included in the state sector as a part of the Minimum Needs Programme with a Plan outlay of Rs 218 crores.

However, to enable the states to continue uninterrupted implementation of Special Nutrition Programme, a sum of Rs 6.69 crores was allowed to them during 1974-75 as partial reimbursement of the expenditure incurred by them.

An expenditure of Rs 1.25 crores was incurred in 1974-75 for continuation of Balwadi Nutrition Programme at the Fourth Plan level. An equal amount has been provided for continuation of the programme during 1975-76.

Integrated Child Development Services

A scheme of Integrated Child Development Services (ICDS) has been included in the Fifth Plan with an outlay of Rs 140 crores in the centrally-sponsored sector to provide a package of services to pre-school children and expectant and nursing mothers. The package will include, besides supplementary nutrition, health check-up, referal services, immunisation, informal education and nutrition and health education. In the ICDS project areas, the nutrition component of the package will come from the separate outlay of Rs 218 crores in the state sector under the Minimum Needs Programme. The programme is to be implemented through state governments and union territory administrations with the maximum possible involvement of voluntary organisations.

Holiday Camps

The scheme of Holiday Camps for Children was started in 1958. The CSWB extends financial assistance to voluntary institutions for organising such camps for children belonging to low income group families. Up to March 1975, 2,530 camps were organised at a cost of Rs 72.53 lakhs.

Foster Care Homes

To provide care for children affected by desertion, divorce, long illness or imprisonment or death of either parent, three Foster Care Homes, one in Madras and two in Bombay, are being run by voluntary institutions. During 1974-75, Rs 90,000 were sanctioned and Rs 82,000 were released by CSWB to these institutions.

Pre-vocational Training

Under this scheme, children in the age group 11-14, who give up studies after primary education for economic or other reasons, are admitted in the pre-vocational training centres. The three-year training course covers general education up to the middle school level and vocational orientation in mechanical and other engineering trades and agriculture. For girls it covers home economics. The scheme has been already transferred to the states.

The five regional centres will continue to function under the Department during the current academic year. Efforts are being made to transfer them later to the state governments concerned or to the Ministry of Education.

United Nations International Children's Emergency Fund provides assistance in the shape of supplies and equipment for various Indian developmental programmes. The Department is the co-ordinating agency for all UNICEF activities in India. UNICEF assistance is utilised in the fields of health, education, community development, nutrition and social welfare. For the year 1975-76, UNICEF has allocated a sum of $ 1.249 crores.

Balsevika Training Programme

The Indian Council for Child Welfare runs centres for training Balsevikas through its state branches and voluntary organisations to meet the requirements of trained personnel for institutions imple-

menting welfare programmes for pre-school children. At present there are 27 such centres. They have trained 1,400 Balsevikas during 1974-75.

Financial assistance is given to ICCW by the government to meet 90 per cent of its expenditure in organising courses. Besides, grants to meet expenditure on salaries of technical staff at the headquarters of ICCW are also given.

The Central Social Welfare Board, has organised six training centres at Allahabad, Gandhigram, Indore, Jamia (Delhi), Sriniketan and Vadodara for training workers required for Family and Child Welfare Projects.

Scheme for Services of Children

A centrally sponsored scheme to provide assistance to voluntary organisations for the expansion of services for the welfare of children in need of care and protection has been formulated.

The Fifth Plan outlay for the scheme is Rs 5 crores. Rs 80 lakhs have been provided for the scheme during 1975-76.

The Department is implementing a scheme of assistance to voluntary organisations for organising creches for babies (0-3 years) of working women in the non-organised sector.

A provision of Rs 5 lakhs was made for this scheme during 1974-75. A sum of Rs 5.93 lakhs has been sanctioned to 10 voluntary organisations for the benefit of 6,175 babies. There is no fixed outlay for the scheme in the Fifth Plan but provision is made in the budget every year on the basis of anticipated expenditure.

Socio-economic Programme

This programme of the Central Social Welfare Board, started in 1958, aims at providing needy women, destitutes and physically handicapped persons with work to supplement the meagre income of their families. Under the programme, the Board has sponsored a number of production units with the support and technical assistance of the Central Small Scale Industries Organisation and regional offices of the All India Handicrafts Board and the All India Handloom Board. From the inception of the programme and up to 31 March 1975, Rs 71.95 lakhs were sanctioned to 218 training-*cum*-production and procurement units and Rs 60.41 lakhs were released. A provision of Rs 50 lakhs has been made during the current financial year.

Maladjusted Groups

Social Defence Programmes

Social Defence Programmes are organised mainly within the framework of specific legislations and allied measures. These measures include preventive, correctional and rehabilitative services in various areas of social defence such as, welfare of prisoners, delinquency control, probation, beggary control and social and moral hygiene.

Welfare of Prisoners

Under the scheme, welfare officers look after the individual problems of prisoners and assist in solving them in liaison with their families. Creches are established in some prisons for the children of women prisoners.

Juvenile Delinquency

Juvenile delinquency is a state subject. Children's Acts of various states provide for necessary machinery such as juvenile courts, Child Welfare Boards, Remand/Observation Homes, Special/Certified/Approved Schools, for prevention and treatment of juvenile delinquency. The Central Children's Act, 1960 is applicable to all the union territories.

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Probation Services

The Probation of Offenders Act, 1958 contains a mandatory provision for calling upon the courts to consider a Social Investigation Report from the Probation Officers in respect of youthful offenders under 21 years of age. It further lays down that if an offender below 21 years of age is sent to a prison, specific reasons for the same will have to be recorded.

Beggary Prevention

Many states have passed anti-beggary legislation. In others, Municipal and Police Acts provide for measures against begging. The Government of India is preparing a model legislation for union territories.

Social and Moral Hygiene

The Suppression of Immoral Traffic in Women and Girls Act, 1956 has been extended to almost all the states and union territories. A number of protective homes, reception centres, shortstay homes and district shelters in various states and union territories have been set up for women and girls facing moral danger.

National Institute of Social Defence

The Central Bureau of Correctional Services, established in 1961, was reconstituted and renamed on 1 January 1975 as the National Institute of Social Defence. The Institute has been assigned technical functions with regard to the coordination, standardisation and development of social defence programmes in various areas including those relating to the prevention of alcoholism, gambling, suicide and drug addiction.

To achieve its goals, the Institute undertakes research, collects statistics, promotes training, drafts model legislations and rules, creates public awareness on social defence problems and establishes liaison with universities and concerned agencies. It also advises central and state governments on various aspects of social defence development. The Institute brings out professional publications including its quarterly journal, 'Social Defence.'

Welfare of Physically Handicapped

Programmes are being implemented for the education, training and rehabilitation of four categories of handicapped persons, namely, the blind, the deaf, the orthopaedically handicapped and the mentally retarded.

Blind

There are 140 schools and training centres for the blind in the country. The National Centre for the Blind, Dehra Dun, provides integrated services. The model school for blind children attached to the Centre is a secondary school. The Centre also has a training centre for the adult blind, a school for partially sighted children, a workshop for the manufacture of Braille appliances, a sheltered workshop and the central Braille press. The national library for the blind, which also forms part of the Centre, circulates Braille literature in the country. The four teachers' training centres at Delhi, Bombay, Calcutta and Madras train 40 to 50 teachers for the blind annually.

Deaf

The National Centre for the Deaf at Hyderabad has a Training Centre for the Adult Deaf and a School for Partially Deaf Children, the only one of its kind in the country. The Training Centre imparts training in tailoring, sheet metal work, electrical wiremanship, carpentry, fitting and gas welding.

Orthopaedically Handicapped

A National Institute for the Orthopaedically Handicapped is being set up in Calcutta. The Institute will concentrate on research and training of personnel for the rehabilitation of the orthopaedics.

Mentally Retarded

A model school for mentally deficient children is functioning in Delhi for children in the age group 6–15. The school also provides training in a few crafts.

Other Services

Assistance is given to voluntary organisations serving the handicapped and cured leprosy patients. The total aid given to them in 1974-75 was Rs 58.82 lakhs. There are 13 special employment exchanges in the country for the physically handicapped. Five more are being set up. They placed 13,300 persons in employment up to 31 December 1974.

Scholarships and National Awards

The Department of Social Welfare awards scholarships to the blind, deaf and orthopaedically handicapped students for general education and for technical and professional training. About 5,050 scholarships were awarded during 1974-75.

National awards to 16 most efficient physically handicapped employees and nine outstanding employers of the physically handicapped were given in 1975.

PROHIBITION

The Constitution (article 47) enjoins on the State to endeavour to bring about prohibition of the consumption of intoxicating drinks and drugs. In December 1954, the Prohibition Enquiry Committee was appointed to suggest a programme and machinery for the implementation of the directive. The Committee recommended that schemes of prohibition be integrated with the country's developmental plans. This was affirmed by a resolution of the Lok Sabha on March 31, 1956. The resolution recommended the formulation of a programme to bring about nationwide prohibition speedily and effectively, which was done in the Second Five Year Plan document. These programmes and objectives were carried over the subsequent Plans but the progress in the country as a whole was slow.

To achieve the goal of total prohibition and to build up adequate social pressure and a nationwide movement, Government has resolved to pursue a minimum twelve-point programme beginning from 2 October 1975. The programme includes measures such as stoppage of drinking in public places, hotels, hostels, restaurants, clubs and at receptions; discontinuance of advertisements and public inducements for drinking; banning of liquor shops near industrial, irrigation and other development projects to keep away the workers from drinking; banning of liquor shops along highways, residential areas, educational institutions, and religious places in labour colonies and declaring of pay days in different areas as 'dry days.'

RESEARCH AND EVALUATION

The Department of Social Welfare has set up a Planning, Research, Evaluation and Monitoring Division for planning and project formulation, sponsoring of research studies and research publications, documentation, compilation and processing of statistical data, holding of seminars on current topics of social welfare and evaluation and monitoring of the outgoing programmes.

SOCIAL LEGISLATION

Both the central and state governments have enacted a number of social laws covering women and children.

The Child Marriage Restraint Act of 1929 provides for punishment in case of marriage to which a male under 18 years of age or a female under 15 years of age is a party. The Hindu Marriage Act, 1955 lays down that for a fresh marriage neither party should have a spouse

living. Among other important social legislations are: the Apprentices Act, 1950; the Reformatory Schools Act, 1897; the Borstal Schools Act; Juvenile Smoking Acts; the Hindu Married Women's Right to Separate Residence and Maintenance Act, 1946; the Hindu Marriage Disabilities Removal Act, 1946; the Hindu Marriage Validating Act, 1949; the Suppression of Immoral Traffic in Women and Girls Act, 1956; the Probation of Offenders Act, 1958 and the Children's Act, 1960 (meant for union territories) and similar Acts passed by the states.

SCHEDULED AND BACKWARD CLASSES

Over one-fifth of India's population comprises the scheduled castes, scheduled tribes and other backward classes.[1] The scheduled castes on account of certain traditional disabilities and the scheduled tribes mainly because of their geographical isolation have not been able to derive in full measure the benefits of planned economic development of the country.

While the Constitution has prescribed certain protective measures and safeguards for these classes, the successive Five Year Plans have regarded their progress as a major objective of national policy.

CONSTITUTIONAL SAFEGUARDS

The Constitution prescribes protection and safeguards for the scheduled castes and tribes and other backward classes either specially or by way of insisting on their general rights as citizens with the object of promoting their educational and economic interests and of removing the social disabilities which the scheduled castes were subjected to. The main safeguards are:

(i) the abolition of 'untouchability' and the forbidding of its practice in any form (art. 17);

(ii) the promotion of their educational and economic interests and their protection from social injustice and all forms of exploitation (art. 46);

(iii) the throwing open by law of Hindu religious institutions of a public character to all classes and sections of Hindus (art. 25);

(iv) the removal of any disability, liability, restriction or condition with regard to access to shops, public restaurants, hotels and places of public entertainment or the use of wells, tanks, bathing ghats, roads and places of public resort maintained wholly or partly out of State funds or dedicated to the use of the general public (art. 15);

(v) the curtailment by law, in the interests of any scheduled tribe, of the general rights of all citizens to move freely, settle in, and acquire property [art. 19(5)];

(vi) the forbidding of any denial of admission to educational institutions maintained by the State or receiving aid out of State funds (art. 29);

(vii) permitting the State to make reservation for the backward classes in public services in case of inadequate representation and requiring the State to consider the claims of the scheduled castes and tribes in the making of appointments to public services (arts. 16 and 335);

(viii) special representation in the Lok Sabha and the state vidhan

[1]The term 'backward classes' includes scheduled castes, scheduled tribes, denotified, nomadic and semi-nomadic tribes and those whose annual income falls below certain prescribed limits.

sabhas to scheduled castes and tribes till 25 January 1980 (arts. 330, 332 and 334);

(ix) the setting up of Tribes Advisory Councils and separate departments in the states and the appointment of a special officer at the centre to promote their welfare and safeguard their interests (arts. 164 and 338 and Fifth Schedule);

(x) special provision for the administration and control of scheduled and tribal areas (art. 244 and Fifth and Sixth Schedules); and

(xi) prohibition of traffic in human beings and forced labour.

LEGISLATION AGAINST UNTOUCHABILITY

The Untouchability (Offences) Act, 1955 provides penalties for preventing a person, on the ground of untouchability, from entering a place of public worship and offering prayers or taking water from a sacred tank, well or spring. Penalties are also provided for enforcing any kind of social disability such as denying access to any shop, restaurant, public hospital or educational institution, hotel or any place of public entertainment; or denying the use of any road, river, well, tank, water tap, bathing ghat, cremation ground, sanitary convenience, dharamshala, sarai or musafirkhana or utensils kept in such institutions and hotels and restaurants. The Act prescribes penalties for enforcing occupational, professional or trade disabilities, or disabilities in the matter of enjoyment of any benefit under a charitable trust, in the construction or occupation of any residential premises in any locality or in the observance of any social or religious usage or ceremony.

The Act also lays down penalties for refusal to sell goods or render services to a person on the ground of untouchability; for molesting, injuring or annoying a person, or organising a boycott of, or taking any part in the ex-communication of a person who has exercised the rights accruing to him as a result of the abolition of untouchability.

Higher penalties have been prescribed for subsequent offences. For purposes of awarding punishment, incitement or abetment of the offence has been treated in the same manner as the commission of the offence. The offences under this Act are cognisable and the onus of proving innocence is on the accused.

For enlarging the scope and making the penal provision more stringent, the Untouchability (Offences) Act, 1955 is being amended. The Untouchability (Offences) Amendment and Miscellaneous Provision Bill, 1972 as reported by the Joint Select Committee is before the Lok Sabha.

The Act is administered by state governments but its implementation is reviewed from time to time by the central government also.

Since 1954 the Government of India have been giving financial support for measures to eradicate untouchability. Both official and non-official agencies are being utilised for this purpose and efforts are made to enlist public co-operation. Most of the states have appointed small committees to enforce the provisions of the Untouchability (Offences) Act. Publicity media such as books, pamphlets, handbills and audio-visual aids have also been pressed into service.

POPULATION

According to the 1971 census, the population of the scheduled castes and scheduled tribes was 7,99,95,896 and 3,80,15,162 respectively. Table 9.3 shows their state-wise distribution.

REPRESENTATION IN LEGISLATURES

Under articles 330 and 332 of the Constitution, seats are reserved for the scheduled castes and scheduled tribes in the Lok Sabha and state vidhan sabhas in proportion to their population. This concession

was initially for a period of 10 years from the commencement of the Constitution but has been extended, through amendments, up to 25 January 1980. Parliamentary Acts provide for such reservations in the union territories having legislatures. Table 9.4 gives details of their representation in the Lok Sabha and vidhan sabhas. There is no reservation of seats in the Rajya Sabha and state vidhan parishads.

Following the introduction of Panchayati Raj, safeguards have been provided for proper representation of the members of the scheduled castes and tribes by reserving seats for them in the Gram Panchayats and other local bodies.

TABLE 9.3
POPULATION OF SCHEDULED CASTES AND TRIBES (1971 CENSUS)

	Scheduled castes	Scheduled tribes
INDIA ..	7,99,95,896	3,80,15,162
States		
Andhra Pradesh	57,74,548	16,57,657
Assam ..	9,12,557	16,06,648
Bihar ..	79,50,652	49,32,767
Gujarat ..	18,25,432	37,34,422
Haryana ..	18,95,933	—
Himachal Pradesh	7,69,572	1,41,610
Jammu & Kashmir	3,81,277	—
Karnataka ..	38,50,034	2,31,268
Kerala ..	17,72,168	2,69,356
Madhya Pradesh	54,53,690	83,87,403
Maharashtra	30,25,761	29,54,249
Manipur ..	16,376	3,34,466
Meghalaya ..	3,887	8,14,230
Nagaland ..	—	4,57,602
Orissa ..	33,10,854	50,71,937
Punjab ..	33,48,217	—
Rajasthan ..	40,75,580	31,25,506
Sikkim ..	—	—
Tamil Nadu ..	73,15,595	3,11,515
Tripura ..	1,92,860	4,50,544
Uttar Pradesh	1,85,48,916	1,98,565
West Bengal ..	88,16,028	25,32,969
Union Territories		
Andaman & Nicobar Islands ..	—	18,102
Arunachal Pradesh	339	3,69,408
Chandigarh	29,073	—
Dadra & Nagar Haveli	1,332	64,445
Delhi	6,35,698	—
Goa, Daman & Diu	16,514	7,654
Lakshadweep	—	29,540
Mizoram	82	3,13,299
Pondicherry	72,921	—

RESERVATION IN THE SERVICES

The manner in which the State carries out its obligation to reserve posts for the scheduled castes and tribes in the public services in case of inadequate representation and to consider their claims consistent with the maintenance of efficiency of administration has been left outside the purview of obligatory consultation with the Public Service Commission [art. 320 (4)].

For the scheduled castes, reservation is 15 per cent of the vacancies for which recruitment is made by open competition on an all-India basis and 16⅔ per cent of the vacancies to which recruitment is made otherwise. For the scheduled tribes, the reservation is 7½ per cent in both cases. Reservations in direct recruitment to class III and IV posts, which normally attract candidates from a locality or region,

are fixed in proportion to the population of the scheduled castes and tribes in the respective states and union territories.

TABLE 9.4
ALLOTMENT OF SEATS IN LEGISLATURES

State/Union Territory	Lok Sabha			Vidhan Sabha		
	Total number of seats	Seats reserved for scheduled castes	Seats reserved for scheduled tribes	Total number of seats	Seats reserved for scheduled castes	Seats reserved for scheduled tribes
States						
Andhra Pradesh	42	6	2	294	39	11
Assam	14	1	2	126	8	16[1]
Bihar	54	8	5	324	46	28
Gujarat	26	2	4	182	12	25
Haryana	10	2	—	90	17	—
Himachal Pradesh	4	1	—	68	15	3
Jammu & Kashmir	6	—	—	76[2]	6	—
Karnataka	28	4	—	224	29	2
Kerala	20	2	—	140	12	2
Madhya Pradesh	40	5	8	320	42	64
Maharashtra	48	3	3	288	17	17
Manipur	2	—	1	60	1	19
Meghalaya[3]	2	—	—	60	—	—
Nagaland[3]	1	—	—	60	—	—
Orissa	21	3	5	147	22	34
Rajasthan	25	4	3	200	32	24
Sikkim	1	—	—	32	—	—
Punjab	13	3	—	117	29	—
Tamil Nadu	39	7	—	234	42	2
Tripura	2	—	1	60	7	17
Uttar Pradesh	85	18	—	425	89	1
West Bengal	42	8	2	294	59	17
Union Territories						
Andaman & Nicobar Islands	1	—	—	—	—	—
Arunachal Pradesh[3]	2	—	—	30	—	—
Chandigarh	1	—	—	—	—	—
Dadra & Nagar Haveli	1	—	1	—	—	—
Delhi	7	1	—	56[4]	9	—
Goa, Daman & Diu	2	—	—	30	—	—
Lakshadweep	1	—	1	—	—	—
Mizoram[3]	1	—	—	30	—	—
Pondicherry	1	—	—	30	5	—
TOTAL	542	78	38	3997	538	282

[1]Four seats are reserved for two autonomous districts (North Cachar Hills and Mikir Hills).

[2]Excluding 24 seats in the territory held by Pakistan.

[3]No reservation has been made.

[4]Metropolitan Council.

Reservation is also made at 15 per cent of the vacancies for the scheduled castes and 7½ per cent for the scheduled tribes in promotions on the results of the competitive examinations limited to departmental candidates in classes II, III and IV and in promotions by selection in classes II, III and IV and to the lowest rung of Class I in grades or services to which direct recruitment, if any, does not exceed 50 per cent. Reservation has also been provided for scheduled castes and scheduled tribes in promotion on the basis of seniority subject to

fitness in class I, II, III and IV posts in grades or services to which direct recruitment, if any, does not exceed 50 per cent.

In promotions by selection within class I to posts carrying an ultimate salary of Rs 2,250 p.m. or less, the scheduled castes and tribes officers, who are senior enough in the zone of consideration for promotion and are within the number of vacancies for which the select list has to be drawn, are included in that list provided they are not considered unfit for promotion.

To facilitate their adequate representation, concessions such as, (i) relaxation in age limit, (ii) relaxation in the standard of suitability, (iii) selection, provided they are not found unfit for the posts, (iv) relaxation of the qualification regarding 'experience' in the case of candidates of the scheduled castes and scheduled tribes, wherever necessary and (v) inclusion of scientific and technical posts up to the lowest grade of class I required for research, in the scheme of reservations, have been provided for. If no suitable scheduled caste, or scheduled tribe candidates are available for the reserved posts, they are treated as unreserved and an equal number of reservations are carried forward to three recruitment years. In no recruitment year, however, the number of reserved vacancies is to exceed 50 per cent of the total vacancies.

To give effect to the reservations, model rosters of 40 points each have been prescribed for recruitment by open competition and otherwise on an all-India basis. If the vacancies in a service or cadre are too few for the purpose, all corresponding posts are grouped together. Annual statements are required to be submitted by the recruiting authorities for scrutiny by the government. For ensuring implementation of the special representation orders, liaison officers have been appointed in different ministries of the union government. A high power committee, with Prime Minister as the chairman, has been set up to review the progress of employment of the scheduled castes and scheduled tribes under the Government of India, the union territories and public sector undertakings.

State governments have also framed rules for the reservation of posts for these classes and taken steps to increase their representation in the state services.

The number of officers under the central government belonging to the scheduled castes and scheduled tribes in various grades as on 1 January 1974 was: class I—1,255; class II—2,578, class III—1,95,091 and class IV (excluding sweepers) 2,78,107. Their number in IAS and IPS as on 1 January 1974 was 363 and 171 respectively.

ADMINISTRATION OF SCHEDULED AND TRIBAL AREAS

Some areas have been 'scheduled' in the States of Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Orissa and Rajasthan under article 244 and the Fifth Schedule to the Constitution. Governors of the respective states submit a report annually to the President on the administration of the 'scheduled' areas in their states.

The tribal areas in the States of Assam and Meghalaya and the Union Territory of Mizoram are administered subject to the provisions of the Sixth Schedule to the Constitution. Under the Schedule, they are divided into autonomous districts. There are eight such districts, namely, North Cachar Hills and Mikir Hills districts in Assam, United Khasi-Jaintia Hills, Jowai and Garo Hills districts in Meghalaya and Chakma, Lakher and Pawi districts in Mizoram. Each autonomous district has a district council consisting of not more than 30 members of whom not more than four can be nominated and the

rest are to be elected on the basis of adult suffrage. The councils are vested with certain administrative, legislative and judicial powers.

WELFARE AND ADVISORY AGENCIES

A special officer designated as the Commissioner for Scheduled Castes and Scheduled Tribes investigates all matters relating to the safeguards for them provided under the Constitution and reports to the President on the working of the safeguards.

The union Ministry of Home Affairs is responsible for the formulation and implementation of schemes for the welfare of the scheduled castes and scheduled tribes and other backward classes and maintains liaison with the states.

Parliamentary Committees

The Government of India set up three Parliamentary Committees, the first in 1968, the second in 1971 and the third in 1973, to examine the implementation of the Constitutional safeguards for the welfare of the scheduled castes and scheduled tribes. The Committee has since been constituted as a standing committee of Parliament, the tenure of the members being one year.

Welfare Departments in States

The state governments and union territory administrations have separate departments to look after the welfare of the scheduled castes and scheduled tribes and other backward classes. The administrative set-up varies from state to state. In Bihar, Madhya Pradesh and Orissa, separate ministers have been appointed to look after tribal welfare as prescribed in article 164 of the Constitution. Some other states have set up committees of members of state legislatures on the pattern of the Parliamentary Committee at the centre.

Voluntary Organisations

A number of voluntary organisations also promote the welfare of the scheduled castes. Important organisations of all-India character are: All India Harijan Sewak Sangh, Delhi; Bharatiya Depressed Classes League, New Delhi; Iswar Saran Ashram, Allahabad; Indian Red Cross Society, New Delhi; Hind Sweepers Sewak Sangh, New Delhi and Ramakrishna Mission, Narendrapur, West Bengal.

Important voluntary organisations for the scheduled tribes are: Bharatiya Adimjati Sewak Sangh, New Delhi; Indian Council for Child Welfare, New Delhi; Andhra Rashtra Adimajati Sewak Sangh, Nellore; Ramakrishna Mission, Cherrapunji, Ranchi, Puri, Silchar, Along and Shillong; Thakkar Bapa Ashram, Nimakhandi, Orissa and the Indian Red Cross Society, New Delhi.

The Servants of India Society, Poona, and All-India Backward Classes Federation, Delhi, look after the interests of the backward classes, while Bharatiya Ghumantu Jan (Khanabadosh) Sewak Sangh, Delhi, serves the nomadic and semi-nomadic tribes.

The Government of India provides grants to national voluntary organisations against specific schemes for the welfare of backward classes.

WELFARE SCHEMES

Expenditure during the Plans

The welfare of scheduled castes and scheduled tribes is given special attention by both the central and state governments. Special programmes for their welfare have been undertaken in the successive Five Year Plans and the size of investment on these special programmes has been increasing from Plan to Plan as shown in Table 9.5.

In addition, state governments have also been spending a sizable amount from their non-Plan budgets on the welfare of these classes.

TABLE 9.5
EXPENDITURE DURING THE PLANS

(*Rs crores*)

Plan	Period	Expenditure
First	1951-56	30.04
Second	1956-61	79.41
Third	1961-66	100.40
Annual Plans	1966-69	68.50
Fourth	1969-74	172.70 (anticipated)
Fifth Plan (outlay)	1974-79	255.00
Special central assistance for sub-plans for tribal areas		200.09

New Strategy

In the Fifth Plan, a new strategy has been adopted for the uplift of the scheduled castes and scheduled tribes. Greater emphasis will be placed on the role of the general sector for providing a major thrust to the development of backward classes. Programmes in the backward classes sector will be of a catalytic nature and will be supplemental to the general sector programmes.

The scheduled castes will be largely benefited by the Minimum Needs Programme. In this programme, priority will be given to the scheduled castes and scheduled tribes and for this purpose general norms will be relaxed for meeting the special requirements of the backward classes and tribal areas.

With regard to the scheduled tribes it has been decided that all those areas which have more than fifty per cent tribal population should be clearly identified and sub-plans should be prepared for these areas. The sub-plan represents the total effort of the region of the central ministries, the state governments and other institutions including financial bodies. Realising that this may not be adequate the union government has also set aside an amount of Rs. two hundred crores as special assistance for the states' tribal development effort in the sub-plan areas. In the first year of the Fifth Plan, advance action was initiated in forty five project areas of the sub-plan by preparing Integrated Tribal Development Projects. The Integrated Project programme is expected to cover practically the entire sub-plan areas in the year 1975-76. In the new set up there will not be any separate identity for the TD Block programmes and this programme as such has come to an end in 1974-75 except in special cases.

Plan Programmes

The Plan programmes for the welfare of backward classes fall into three main groups: centrally-operated, centrally-sponsored and state sector. Important schemes being implemented under these categories are briefly described below.

Central Schemes

Training and Coaching Centres

With a view to helping the scheduled castes and scheduled tribes to secure employment, two schemes, namely, pre-examination training centres and coaching-*cum*-guidance centres, have been started. Under the first scheme, there are six centres located at Allahabad, Delhi (through a private coaching centre), Jaipur, Madras, Patiala and Shillong which impart coaching to scheduled castes and scheduled tribes for all-India services examinations conducted by the Union Public Service Commission. Centres for imparting training to candidates for state services examinations have also been set up in the States of Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Orissa, Uttar Pradesh, West Bengal and Union Territory of Delhi. Two centres for imparting coaching for engineering services examinations have also been set up at Allahabad and Tiruchirapalli.

Four coaching-*cum*-guidance centres, one each at the employment exchanges in Delhi, Kanpur, Jabalpur and Madras have been set up to conduct courses of 'confidence building and interview techniques' for the scheduled caste and scheduled tribe applicants on the live registers of the concerned employment exchanges.

Post-Matric Scholarships

While the size of every other scheme has to depend on the constraint of budget, in the case of post-matric scholarships it is the number of eligible students that determines the total expenditure. The rates of maintenance allowance admissible under the scheme have been appreciably enhanced with effect from the academic year 1974-75. The scheme has also been rationalised.

Girls Hostels for the Scheduled Castes and Tribes

Under the scheme, financial assistance is given to state and union territory governments for the construction of new hostels and to expand existing ones at any place where the facilities for girls belonging to these classes are inadequate. A sum of Rs 1.96 crores was spent on the scheme during the Fourth Plan. An amount of Rs 4 crores has been allocated during the Fifth Plan.

Assistance to Co-operatives

As the co-operative movement has a vital role in the elimination of the exploiters of the weaker sections, especially in the tribal areas, a net-work of co-operative societies—forest labour, multi-purpose, labour contract and construction, and marketing societies and apex co-operative organisations—has been organised with government assistance.

Tribal Research Institutes

There are at present 11 Tribal Research Institutes in the country. To co-ordinate their activities, a 30-member Central Research Advisory Council has been set up. The Council provides guidance on policy formulation and serves as a clearing house for the Institutes, central and state governments and other research organisations connected with tribal problems.

Overseas Scholarships

Scholarships to deserving scheduled caste and scheduled tribe students for studies in foreign countries are being awarded by the union government since 1953. The number of such scholarships every year is 21—11 for scheduled castes, six for scheduled tribes, one for denotified nomadic and semi-nomadic tribes and three for other backward classes. Tourist class sea passage is provided to students who receive foreign scholarships from other sources without travel grants.

Also, 17½ per cent of merit scholarships granted by the centre to students of the lower income groups for studies in the institutions which are members of the Indian Public Schools Conference are reserved for backward communities. Some of the state governments as also some public schools offer similar scholarships.

State Sector Schemes

The state sector programme for which central assistance is given in the shape of block grants and loans can be divided into three main groups, namely, education, economic uplift and health, housing and other schemes. The particulars of the schemes are:

Education

(i) Pre-matric scholarships and stipends
(ii) Exemption from tuition and examination fees
(iii) Provision of educational equipments
(iv) Provision of mid-day meals
(v) Setting up of Ashram schools (basic type residential schools)
(vi) Grants for the construction of school and hostel buildings

Economic Development

(i) Provision of land and irrigation
(ii) Supply of bullocks, agricultural implements, seeds and manure
(iii) Development of cottage industries
(iv) Development of communications
(v) Co-operation
(vi) Colonisation of shifting cultivators
(vii) Supply of poultry, sheep, pigs and goats

Health, Housing and Other Schemes

(i) Medical facilities
(ii) Drinking water supply
(iii) Provision of houses and house-sites
(iv) Provision of legal aid
(v) Grants to non-official agencies working at state level.

RELIEF AND REHABILITATION

Relief and Resettlement in the Western Border Areas

During the course of hostilities between India and Pakistan in December 1971, over eight lakh Indian nationals living in the border areas of Jammu and Kashmir, Punjab and Rajasthan had to migrate to safer places. Besides relief assistance, financial assistance was also provided to them for the reconstruction of their houses and for the resumption of their normal means of livelihood. All these persons have now returned to their homes. Up to 31 March 1975 the central government spent a sum of Rs 37 crores for providing relief and rehabilitation assistance to the affected persons.

Out of about 18,000 persons uprooted from Chhamb-Niabat area in Jammu and Kashmir as a result of delineation of the actual line of control under the Simla Agreement, about 1,000 had returned to their original villages falling on the Indian side of the line of control, and were provided with the necessary rehabilitation assistance. Another about 2,000 persons have been moved to the resettlement sites in Hiranagar tehsil. Approximately 15,000 persons still living in Kishanpur-Manwal Camps remain to be moved in a phased manner.

About 56,000 Pakistani nationals who had crossed over to Rajasthan and Gujarat at the end of the conflict are being maintained in relief camps in these states pending their return.

Resettlement of Migrants from former East Pakistan

For the effective and expeditious execution of the scheme to resettle displaced persons from former East Pakistan in Dandakaranya and for integrated development of this area with particular regard to the promotion of the interests of the area's tribal population, the Government of India set up a central authority known as the Dandakaranya Development Authority in September, 1958.

Area of operation of the Project is confined to two zones each in Koraput district in Orissa and in Bastar district in Madhya Pradesh. So far 59,120 hectares of land have been reclaimed where 308 villages of displaced persons and 105 villages for tribals have been set up. 17,907 families of displaced persons and 3,492 families of tribals have been settled so far. 17,200 agriculturist families from former East Pakistan were awaiting rehabilitation as on 1 April 1975.

Repatriates from Sri Lanka

Under the Indo-Ceylon Agreement of 1964, 5.25 lakh persons of Indian origin together with the natural increase are to be repatriated to India over a period of 15 years. Over 1.75 lakh of persons had been repatriated till May 1975. The repatriates are being resettled

either through employment in plantations or by grant of financial assistance for agricultural and non-agricultural occupations.

Under an agreement concluded between India and Sri Lanka in January 1974, the Government of India has agreed to accept repatriation of an additional 75,000 persons of Indian origin together with the natural increase after the repatriation of 5.25 lakh persons is completed. It will be phased over a period of two years.

Prime Minister's National Relief Fund

The Prime Minister's National Relief Fund was started in 1947. Up to the end of March 1975, public contribution to the fund amounted to about Rs 6.79 crores. Over Rs 5.94 crores were utilised in providing relief to people affected by natural calamities such as earthquakes, floods, cyclones, droughts, famines and fire. Relief was also given in the early stages to displaced persons from Pakistan.

10 MASS COMMUNICATION

The term mass communication stands for dissemination of information, ideas and entertainment by the use of communication media. The media include those which use modern means of communication such as the radio, the film, the television, the press, publications and advertising. In fact they co-exist with important traditional media such as folk dance, drama and puppetry. In India, the Ministry of Information and Broadcasting has a huge set-up of mass communication, with the regional and branch offices as well as mobile units, spread all over the country.

RADIO

Radio broadcasts started in India in 1927 with two privately-owned transmitters at Bombay and Calcutta. The Government of India took them over in 1930 and the Posts and Telegraphs Department started operating them under the name of Indian Broadcasting Service. In 1936, the name of the Service was changed to All India Radio (also known as 'Akashvani' since 1957) and it was made a separate department. AIR is now the biggest media organisation of the Ministry of Information and Broadcasting and its programmes are received by 1.48 crore radio receiver sets[1] in India. Broadcasting is wholly a state-owned system in India. It is serving as an effective medium not only to inform and educate people but also to provide healthy entertainment. It is also helping to create a climate of opinion in which social change can take place and people could be involved in the process.

India will get 850 medium wave broadcasting frequencies—four times the present number—following an agreement arrived at a conference of over 100 countries held in Geneva in November 1975. The conference was held under the auspices of the International Telecommunication Union to evolve an agreement on the use of frequencies in the medium and low frequency bands for broadcasting service.

Broadcasting Network and Programme Composition

All India Radio's network consisted of six radio stations at the time of Independence in 1947. Now there are 71 stations[2]. In addition, there are three auxiliary studio centres at Vadodara, Darbhanga and Shantiniketan and two Vividh Bharati/commercial centres, one at Chandigarh and the other at Kanpur. These cover all the important cultural and linguistic regions of the country. AIR's 'home service' programmes are transmitted for 2.83 lakh hours every year (more than 740 hours per day), excluding 1.37 lakh hours of Vividh Bharati programmes. There are also 'external service' transmissions, which present pro-

[1] For circle-wise and receiver-type break-up, see Table 10.1.

[2] The 71 radio stations, grouped into five zones, are the following: *North zone:* Ajmer, Allahabad, Aligarh, Bikaner, Delhi, Gorakhpur, Jaipur, Jodhpur, Jullundur, Lucknow, Mathura, Rampur, Simla, Udaipur and Varanasi; *East zone:* Agartala, Aizawl, Bhagalpur, Calcutta, Cuttack, Dibrugarh, Gauhati, Imphal, Jeypore, Kohima, Kurseong, Ranchi, Pasighat, Patna, Sambalpur, Shillong, Silchar, Siliguri, Tawang and Tezu: *West zone*: Ahmadabad, Bhopal, Bhuj, Bombay, Gwalior, Indore, Jabalpur, Nagpur, Panaji, Parbhani, Pune, Raipur, Rajkot and Sangli; *South zone*: Alleppey, Bangalore, Bhadravati, Calicut, Coimbatore, Cuddapah, Dharwar, Gulbarga, Hyderabad, Madras, Mysore, Pondicherry, Port Blair, Tiruchirappalli, Tirunelveli, Trichur, Trivandrum, Vijayawada and Vishakhapatnam; and *Kashmir zone*: Jammu, Leh and Srinagar.

TABLE 10.1

NUMBER OF BROADCAST RECEIVER LICENCES (RADIO)[1]

Name of Circle	Domestic	Concessional				Commercial			Possession			Total
		Cheap	Community	School	Hospital	Urban	Rural	Low cost	Dealer	Non-dealer	Demonstration	
1. Andhra	7,57,636	2,15,056	3,504	1,651	152	5,055	1,142	402	2,044	231	207	9,87,080
2. Bihar	4,39,873	86,472	1,276	475	82	2,341	447	79	236	1,094	24	5,32,399
3. Delhi	5,87,891	4,07,626	385	268	6	19,017	—	—	4,804	67	332	10,20,396
4. Gujarat	10,30,490	2,35,961	5,160	664	136	8,220	2,610	2,674	3,217	126	519	12,89,777
5. Jammu & Kashmir	1,24,024	67,488	2,010	106	5	1,129	—	—	715	8	210	1,95,695
6. Kerala	5,94,234	42,573	2,883	1,105	100	4,907	5,012	143	1,486	64	335	6,52,842
7. Karnataka	10,16,987	1,17,803	6,110	1,976	66	9,940	2,734	582	2,352	176	519	11,59,245
8. Maharashtra	19,57,865	1,80,673	27,868	2,826	281	17,099	3,782	589	5,446	893	532	21,97,854
9. Madhya Pradesh	5,08,738	89,348	2,186	532	58	4,849	883	376	1,643	155	336	6,09,104
10. North Eastern	1,77,311	11,053	3,561	211	29	1,011	250	26	741	22	252	1,94,467
11. North Western	7,51,190	6,32,130	1,373	960	261	10,368	3,242	7,622	4,551	216	157	14,12,070
12. Orissa	1,59,457	22,802	1,337	355	25	1,076	—	—	536	13	142	1,85,743
13. Rajasthan	3,99,454	1,35,216	472	1,645	127	6,178	1,690	1,273	1,370	102	177	5,47,704
14. Tamil Nadu	13,34,394	1,21,963	15,848	2,923	149	9,899	2,416	285	3,465	1,044	400	14,92,788
15. Uttar Pradesh	8,45,231	4,01,955	737	1,440	135	7,893	1,751	3,902	238	5,067	247	12,68,596
16. West Bengal	5,74,248	4,28,065	857	339	39	3,458	1,609	1,165	2,853	72	124	10,12,829
17. Army Postal	81,545	7,190	—	—	89	333	—	222	335	14	4	89,510
TOTAL	1,13,40,568	32,03,374	75,567	17,476	1,740	1,12,773	27,568	19,118	41,719	3,474	4,720	1,48,48,097

[1]As on 31 December 1974.

grames in 16 foreign languages and 8 Indian languages for 53 hours daily to project India's viewpoint on important issues to listeners abroad and also project the cultural heritage of the country, its art, literature, music and socio-economic advance under the Five Year Plans. The programmes which cover 68 per cent of the geographical area and 81 per cent of the population of the country are beamed from 147 transmitters, of which 115 are medium-wave transmitters.

In the 'home service' programmes, 41.4 per cent of the broadcasting time is claimed by music and 22.9 per cent by news. Eight percent of the time is allotted to talks and discussions, followed by 6.1 per cent for rural programmes. The principal ingredients of 'home service' programmes and their duration are given in Table 10.2.

TABLE 10.2
COMPOSITION AND DURATION OF HOME SERVICE PROGRAMMES (1974)

Type of programme	Duration		Approximate percentage
	Hrs.	Mts.	
Classical vocal	23,880	34	8.4
Classical instrumental	21,360	12	7.5
Folk vocal	8,725	8	3.1
Folk instrumental	174	21	0.1
Light vocal	25,446	54	9.0
Light instrumental	3,236	43	1.1
Devotional music	12,548	49	4.4
Film music	15,948	49	5.6
Western music	6,188	3	2.2
Talks, discussions, etc.	25,756	26	9.1
Drama	10,591	40	3.7
News	64,995	44	22.9
Religious	512	35	0.2
Children	3,639	46	1.3
Women	3,882	24	1.4
Rural	17,333	4	6.1
Industrial	3,853	59	1.4
Armed forces	4,822	31	1.7
Tribal	4,644	14	1.6
Educational	14,218	39	5.0
Publicity	6,563	45	2.3
Others	5,476	48	1.9
TOTAL	2,83,801	14	100.0
Vividh Bharati	1,37,519	48	
GRAND TOTAL	4,21,321	2	

Music

Programmes of music are broadcast from all stations of AIR and consist of classical, light classical, light folk, tribal and film music. A number of stations also broadcast western music. On an average around 41 per cent of the total broadcasting time is devoted to music. Classical music which was largely a preserve of some 'gharana and princely courts in the pre-broadcasting period, has now become 'democratized' through AIR programmes and has evoked popular interest in forms and styles of India's ancient musical traditions.

Classical music programmes include a weekly national programme of music (started in 1952) which presents to a nation-wide audience the leading exponents of both Hindustani and Karnatak systems of music. A festival of music, known as Radio Sangeet Sammelan, is also organised every year. Renowned artistes of both vocal and instrumental music, participate in the concerts which are held before an invited audience, at selected places in different parts of the country. The

recordings of these concerts are broadcast on AIR network. The Sammelan is preceded by a music competition with the objective of discovering new talent from among the 16-24 age group musicians. In all 51 concerts—28 of Hindustani and 23 of Karnatak music—were held during the Radio Sangeet Sammelan 1974. In April 1974, a programme of classical music by young musicians was started. It consists of concerts in Hindustani music which are broadcast from Delhi every Tuesday and are relayed by other stations of northern India, while concerts of Karnatak music are broadcast from Madras every Friday and are relayed by other stations of southern India. The aim of this programme of classical music is to discover young talent for the national programme of music.

A national programme of regional music was also started in January 1973, which brings to the listeners the rich tradition of folk and light music of the various regions of the country. The programme is broadcast on the first Thursday of every month from Delhi and is relayed by all other stations of AIR.

The national orchestra, known as Vadya Vrinda, consisting of both Hindustani and Karnatak instrumentalists was started in 1952 at the Delhi station and a sizeable reportoire of compositions based on traditional ragas and tunes has been built.

Plays and Features

Outstanding plays from Indian languages are broadcast on the fourth Thursday of every month in the national programme of plays, started in 1956. In 1973-74 a dramatised serial of the great epic 'Ramcharit Manas' was presented in twelve parts in the national hook-up in connection with the fourth centenary of Ramcharit Manas. The national programme of features, which was started in 1956, presents various facets of economic development as also of cultural and social life. The original script may be in English or Hindi, but is invariably translated into regional languages and is broadcast from all the regional stations.

News and Current Affairs

The News Services Division of AIR attempts comprehensive and speedy coverage of news and views through its news bulletins, commentaries and discussions on current affairs. Besides noticing major trends in political, economic, social, cultural and scientific fields, it gives adequate attention to parliamentary proceedings, rural development and sports activities. News is broadcast daily through 235 bulletins in 19 Indian and 25 foreign languages and 34 local dialects. Of these, 71 bulletins are beamed in the 'home service' from Delhi and relayed by the other AIR stations; 106 regional bulletins are broadcast from regional stations and 58 bulletins are beamed to listeners abroad. The regional bulletins were introduced in April 1953. Specialised news bulletins carrying world news, sports news and state and development news were introduced in 1974; yet another feature of news coverage was the introduction of a news bulletin in Sanskrit.

When Parliament is in session, daily commentaries in English as well as Hindi review the day's proceedings in the Houses. Commentaries by specialists in various fields and scripts from AIR's correspondents are broadcast in English and Hindi in the programmes called 'spotlight' and 'Samayiki' respectively. A special bulletin on 'Question Hour in Parliament' is also broadcast. In the 'current affairs' programme every Sunday, specialists take up live issues for a threadbare discussion. Eye-witness accounts, interviews with important

persons and reactions of the common man to the happenings around him are presented through radio newsreels in both English and Hindi.

AIR gathers its news mainly by subscribing to news agencies and by monitoring major broadcasting stations of the world. More than almost a third of news coverage is accounted for by AIR's own corps of about 60 correspondents in India and abroad. In addition, there are 95 part-time correspondents in India and abroad to supplement the news coverage by full-time correspondents. The news broadcasts from AIR cover daily 32 hours and 6 minutes, about 23 per cent of the total broadcast time.

External Services Programmes for listeners abroad consist of news, daily commentary and press review, talks, discussions and music, mainly light classical, light, film and folk. These are broadcast in two major services: general overseas service and the Urdu service. The former is beamed for 9 hours and 45 minutes daily to U.K., East, North and South-East Asia, Australia, New Zealand, East, West and North Africa, while the latter is presented for 9 hours and 30 minutes daily to Urdu-loving listeners of the Indian sub-continent. The West Asian service broadcasts programmes in Arabic, Baluchi, Dari, Persian and Pushtu. East African countries are served by the Swahili service, while the French service is directed to North and West Africa. Other area-oriented services are in Burmese, Chinese, Indonesian, Nepali, Russian, Sinhala, Thai and Tibetan languages.

Composite programmes comprising news, press reviews, commentaries, talks, music and features are broadcast in Indian languages—Bengali, Gujarati, Hindi, Konkani, Punjabi, Sindhi, Tamil and Urdu. The object of these programmes is to entertain Indians abroad and keep them in touch with the events and developments in India.

AIR supplies taped programmes to broadcasting organisations of various foreign countries, including 18 countries with which India has entered into cultural agreements. They use these programmes for their home audiences with a view to acquainting them with the cultural and social aspects of life in India. Visiting correspondents of foreign broadcasting organisations are provided with studio and recording facilities.

Vividh Bharati and Commercial Service Popular entertainment programmes are broadcast mostly on the medium-wave for 12 hours and 20 minutes daily from 36 centres in the Vividh Bharati service, which was started on 3 October 1957. Film music, humorous skits, short plays and features are presented in these programmes. Leading Indian film personalities present their favourite songs and recount their experiences in 'Jayamala' programme, which is broadcast for the Armed Forces.

Commercial advertising on the radio which was introduced on 1 November 1967 from Bombay-Nagpur on an experimental basis, was gradually extended to Calcutta (1968); Delhi and Madras-Tiruchirapalli (1969); Chandigarh-Jullundur, Bangalore, Dharwar, Ahmadabad-Rajkot, Kanpur-Lucknow-Allahabad (1970), Hyderabad-Vijayawada (1971) and Bhopal, Indore, Cuttack, Jaipur, Jodhpur, Patna, Ranchi and Trivandrum (1975). Advertisements are accepted in any language as tape-recorded 'spots' of 15 seconds or 30 seconds duration. Sponsored programmes were introduced in May 1970. In 1973-74, the revenue from commercial advertising amounted to Rs 4.87 crores.

Programmes for Special Audiences

The programmes for special audiences and occasions include programmes for the Armed Forces, women and children, the youth, sportsmen and students, rural and tribal people and industrial workers. Fourteen stations broadcast daily programmes for the Armed Forces, while 42 stations present programmes twice or thrice a week in regional languages for women with the objective of providing entertainment and imparting information on household topics. In 1975 special programmes were broadcast from all stations of AIR to mark the International Women's Year.

Intensive family planning campaigns, which were started in 1967 with 22 family planning programme units at various stations, are now planned by 36 units. More than 28,000 programmes on this subject were broadcast in 1974-75. Similarly, almost all the stations broadcast programmes for the children twice or thrice a week in Indian languages. Such programmes are also broadcast in a few foreign languages like Burmese, Nepali and Tibetan, while the Bangalore, Bombay and Madras stations broadcast a 30-minute weekly programme in English for children.

Programmes for rural areas are planned and produced by farm and home units, which have been located at 35 stations. Keeping in view the pattern of development in particular areas, programmes pertaining to agriculture, animal husbandry, co-operation, cottage industries and allied subjects are also broadcast. In addition to the daily half-hour hard core programme, many stations broadcast twice a day agricultural news bulletins dealing with topical hints on farm operations designed to guide farmers on new methods of cultivation. Three stations have started a special programme entitled "University on the AIR" dealing with agriculture and animal husbandry for the benefit of university students.

Programmes consisting of both music and spoken word are put out in more than 100 tribal dialects for the Adivasis from various stations. For the industrial workers, 23 stations present special programmes of 20 to 35 minutes' duration on 4 to 6 days a week.

Special occasions like the Republic Day, Independence Day, visits of foreign dignitaries or the visits of Indian dignitaries abroad and anniversaries are extensively noticed by presenting special programmes on the national hook-up of AIR.

'Yuva Vani', Sports and School Broadcasts

Programmes for the youth in Yuva Vani are broadcast from Calcutta, Delhi, Hyderabad, Jammu, Patna and Srinagar stations. Yuva Vani was started from Delhi in 1969, from Calcutta and Hyderabad in 1970, from Jammu in 1974, and from Patna and Srinagar in 1975. This service, provides a forum to the youth between the ages of 15 and 25 years, who present their viewpoint by participating in a wide range of programmes — talks, discussions, interviews, plays, features and music. A youth news bulletin is also broadcast by the youth themselves.

In addition, 49 stations broadcast programmes of varying duration and frequency in different languages for the youth.

Sports events in India and abroad are covered by reviews, running commentaries and voice despatches. Four metropolitan centres of Bombay, Calcutta, Delhi and Madras present a daily sports service of 95 minutes that covers all the important sports events. Besides, two news bulletins, one in English and the other in Hindi, of 5 minutes duration, are also broadcast. A 10-minute sports news-reel is broadcast every Monday at 8.15 p.m.

For students in schools and universities, 28 AIR stations relay

programmes in regional languages which are based on school curriculum, while 24 stations broadcast academic programmes in English as well as regional languages for the university students.

Audience Research

The Audience Research Unit undertakes regular surveys and analyses of listeners' reactions to various types of programmes broadcast on the AIR network. It provides data for determining the rates of 'spots' and sponsored programmes in the commercial service, and also surveys the reception quality of various stations.

Transcription and Programme Exchange

The programme exchange and transcription service of AIR helps different stations to exchange outstanding programmes, transcribes the speeches of eminent personalities and maintains the Library of Sound Archives.

The collection consists of tape-recordings, discs and stampers of a large variety of programmes. The Archives' most valuable possession consists of over 51 hours of rcorded voice of Gandhiji, Nearly 3,000 tape-recordings of about 800 hours duration of Jawaharlal Nehru's speeches and the voice tapes of Tagore, Netaji, Rajagopalachari and Sardar Patel have been preserved.

Among other valuable items preserved are: (i) recitation from the Vedas in Sanskrit in the traditional style; (ii) poetry recitation by eminent poets in Hindi and other languages; (iii) recitals by old masters of music, both Hindustani and Karnatak; (iv) selected items of music by eminent musicians representing different 'gharanas'; and, (v) representative pieces of folk music, devotional music and stage songs. Some of the recordings of old masters of music have been commercially released.

The Delhi station of AIR is broadcasting a weekly programme entitled 'Chayan' for an hour on Sundays based on the recordings available in the archives. This service was started in April 1974.

More than 100 speeches of the Prime Minister were transcribed by the unit in 1974.

Programme Journals

All India Radio brings out eight programme journals. These are: Akashvani (English), Akashvani (Hindi), and Awaz (Urdu) published from Delhi; Betar Jagat (Bengali) and Akashi (Assamese) published from Calcutta; Vanoli (Tamil) from Madras; Vani (Telugu) from Vijayawada and Nabhovani (Gujarati) published from Ahmadabad. Akashvani (English) is a weekly, while the rest of the journals are fortnightlies. External Services Division of AIR also brings out quarterly programme folders intended for the overseas listeners, one each in Arabic, Burmese, Chinese, French, Indonesian, Nepali, Persian, Pushtu, Swahili and Tibetan. The journal in English, 'India Calling', is a monthly.

TELEVISION

The first television centre in India was commissioned at Delhi in 1959. As a UNESCO-aided project, its purpose was to gauge the effectiveness of television in community development and adult education. Transmission was limited to a 24-km radius and tele-clubs were organised at twenty community centres, where the viewers engaged themselves in group discussions after every telecast. The success of the project made way for further expansion of television services and the media is now on the threshold of rapid expansion. Besides

the television centre at Bombay, which was commissioned in 1972, two other centres were set up in 1973 at Srinagar (26 January) and Amritsar (29 September) and a relay centre at Pune (2 October). In 1975 television centres were commissioned at Calcutta (9 August), Madras (15 August) and Lucknow (27 November).

A decision was taken to introduce commercial services from 1 January 1976. Subsequently it was also decided to separate TV from sound broadcasting.

Transmission Range and TV Receivers

The Delhi TV centre has a reception range of 68 km while the Bombay centre has a range between 70 km and 100 km depending upon direction. The relay centre at Pune has extended the range of Bombay TV programmes. The Amritsar centre has a range of 65 km.

The number of TV receiver licences has risen from 551 in 1963 to 2,75,424 at the end of 1974. The circle-wise and receiver-type break-up is given in Table 10.3.

Indigenous production of TV receivers, which largely depends on the expansion programme of TV network in the country, has shown steady growth. Nearly 75,000 sets are now produced every year, 66 per cent of the production being in the small-scale sector. There are 59 units in the small-scale sector, of which 84 have gone into production. In the organised sector, there are 10 licensed production units including State Industrial Development Corporations of which 5 have gone into production.

Programmes

Delhi Centre

The Delhi centre telecasts programmes for 4 hours on week days and the viewers have a wide range of choice in the programmes. News in Hindi and English and commentaries have their daily share. Feature films in Hindi are telecast on Sundays and regional language films and old Hindi films are shown on Saturdays. Programme for the farmers, 'Krishi Darshan', is presented thrice a week and is directed to community viewing centres in 86 villages in Delhi, Haryana and Uttar Pradesh. Other programmes for special audiences include those for children, youth and housewives.

For the students, in-school TV programmes were started in 1961. Lessons in English, mathematics, physics, chemistry and biology, based on the curricula of the schools, are telecast. From 3 March 1975 non-formal lessons are being telecast by the Delhi Centre for children of primary school going age. These programmes are being put out on Mondays and Tuesdays at 10.15 a.m. For the first time a morning transmission during summer vacation for the benefit of the students of different age groups was introduced in 1975.

An analysis of the programme time shows that news and current affairs claim 21.5 per cent of the transmission time, entertainment films 27 per cent, while 16 per cent of the time is devoted to special audience programmes.

Source-wise, 84 per cent of the programmes of the Delhi centre originate from its own studios, 2 per cent are exchange programmes received from other TV centres in India, while 14 per cent are imported.

Bombay Centre

Programmes are telecast in English, Gujarati, Hindi, Marathi and Urdu for three hours daily, with additional time on Saturdays and Sundays. Three news bulletins, one each in English, Hindi and Marathi, are telecast daily. News commentaries are also presented in Hindi and Marathi. The programme for the industrial workers called, 'Kamgar Vishwa' is telecast on Mondays and Thursdays. A film unit, station-

TABLE 10.3

NUMBER OF BROADCAST RECEIVER LICENCES (TELEVISION)[1]

Name of Circle	Concessional					Commercial	Dealer	NDPL	Demons-tration	Total
	Domestic	Cheap	Community	School	Hospital					
Andhra	9									9
Delhi	1,40,381	—	373	987	30	1,295	—	10	324	1,43,400
J & K	2,240	15	373	—	—	34	53	—	10	2,725
Kerala	5	—	—	—	—	—	—	—	—	5
Maharashtra	94,967	—	140	661	29	977	30	4	24	96,832
Punjab	25,021	34	—	—	—	476	—	—	7	25,538
Rajasthan	15	—	—	—	—	1	—	—	—	16
Tamil Nadu	2	—	—	—	—	5	2	7	2	18
U.P.	6,133	—	—	—	—	327	—	—	34	6,494
West Bengal	152	—	—	—	—	—	—	23	—	175
A. P. S.	198	5	—	—	—	9	—	—	—	212
TOTAL	2,69,123	54	886	1,648	59	3,124	85	44	401	2,75,424

[1]As on 31 December 1974.

ed at Pune, visits rural areas and prepares variety programmes for the rural audiences, including programmes on agricultural operations, which are then telecast both from Bombay and Pune. Sports reviews and film coverage of sports activities elsewhere are shown twice a week. Regional language feature films are shown on Saturdays, while Hindi films are telecast on Sundays. Children's films are shown once a week.

School TV was started from Bombay on 8 October 1973. Three programmes of 20 minutes each on English and science subjects are telecast on Mondays, Wednesdays and Fridays.

Pune Centre

The relay centre at Poona transmits programmes of the Bombay centre and covers an area of 23,000 sq. km around Pune. School programmes are also relayed from this centre.

Srinagar Centre

Programmes in Kashmiri and Urdu are telecast for four hours daily by the Srinagar centre with an additional two-hour morning transmission on Sundays. Programmes for the special audiences include those for the youth, women, children and the rural community.

Amritsar Centre

The Amritsar centre telecasts programmes in English, Hindi, Punjabi and Urdu for three hours daily and are viewed on both sides of the international border. A camera crew at Amritsar prepares film material on social, cultural and other activities of Punjab for inclusion in the programmes. For the rural audiences, the programme is telecast once a week. Cartoon and documentary films, science magazine, quiz and Punjabi plays and English film serials have their share in the programmes that are presented from this station.

Calcutta Centre

Commissioned on 9 August 1975, the Calcutta Centre has a telecast range of 45 km covering an area of 6,350 sq. km and a population of 115 lakhs.

Madras Centre

The Madras TV centre which was commissioned on 15 August 1975 has a provision for a transmitting antenna to be mounted on a 175 metre self-supporting tower. The centre started with a 2-hour daily programmes with half an hour extension on Saturdays.

Lucknow Centre

The Lucknow centre which was commissioned on 27 November 1975, is the first centre in the TV net-work to serve the hinterland. Though the present telecast range is 60 km it will have a telecast range of 75 km when the height of the tower is raised. A considerable part of the programme contents is rural oriented.

Satellite TV Experiment

With the launching of the Applications Technology Satellite-6 (ATS-6) on 30 May 1974 by the United States of America, India has become one of the beneficiary countries. The satellite was made available for instructional programmes for four hours every day for a year and about 2,400 villages in the six states of Andhra Pradesh, Bihar, Karnataka, Madhya Pradesh, Orissa and Rajasthan are benefited. In all 2,400 special television sets have been provided. While the responsibility of the spacecraft is that of the NASA the full responsibility for the ground segment is that of the Indian Space Research Organisation (ISRO), Ahmadabad. Software is the responsibility of AIR. The programmes are being telecast on the basis of a systematic programme production plan which has been devised to meet the target of a total of 1,326 hours of programmes required to be telecast during the SITE year. The

experiment began on 1 August 1975. Three production centres were also opened at Cuttack, Delhi and Hyderabad, with a studio complex and allied film facilities. Instructional programmes are beamed to the satellite from earth stations, for direct reception on TV sets. Programmes for the primary schools are telecast in the morning transmission every day, while the evening transmission presents programmes on improved agricultural practices, hygiene, family planning, national integration and allied topics.

THE PRESS

The Registrar of Newspapers for India, appointed under the provisions of the Press and Registration of Books (Amendment) Act, 1955, prepares an annual report on the press, which is presented to Parliament. The Registrar also allots newsprint and recommends import of printing machinery for newspapers.

The number of newspapers stood at 12,185 at the end of 1974 compared to 12,653 in 1973, showing a decrease of 468 newspapers during the year. Nearly a third (30.9 per cent) of the newspapers were published from the four metropolitan cities of Bombay, Calcutta, Delhi and Madras.

Out of 12,185 newspapers, 822 were dailies, 68 tri/bi-weeklies, 3,666 weeklies and 7,629 other periodicals. Statewise, Maharashtra had the largest number of papers (1,750) followed by Uttar Pradesh which had 1,629, Delhi 1,452, West Bengal 1,174, and Tamil Nadu 836. Other states which had more than 500 newspapers in 1974 were Andhra Pradesh (743), Rajasthan (698), Kerala (626), Karnataka (545), Madhya Pradesh (540) and Gujarat (530). The

TABLE 10.4
NUMBER OF PAPERS (STATE-WISE)

State/Union Territory	Dailies	Tri/bi-weeklies	Weeklies	Others	Total 1974	Total 1973
Andhra Pradesh	32	2	252	457	743	702
Assam	6	2	24	43	75	85
Bihar	13	2	126	133	274	262
Gujarat	31	2	131	366	530	555
Haryana	5	2	77	130	214	214
Himachal Pradesh	1	—	19	42	62	65
Jammu and Kashmir	18	—	102	25	145	153
Karnataka	68	2	163	312	545	556
Kerala	75	—	85	466	626	656
Maharashtra	122	10	422	1,196	1,750	1,818
Madhya Pradesh	78	9	282	171	540	559
Manipur	6	—	2	20	28	29
Meghalaya	1	2	13	11	27	30
Nagaland	—	—	2	1	3	3
Orissa	7	—	22	122	151	168
Punjab	33	1	151	270	455	456
Rajasthan	38	4	334	322	698	691
Tamil Nadu	66	2	108	660	836	915
Tripura	5	2	19	2	28	22
Uttar Pradesh	135	17	822	655	1,629	1,797
West Bengal	30	6	231	907	1,174	1,278
Andaman and Nicobar	1	—	1	2	4	4
Chandigarh	6	—	21	80	107	105
Dadra and Nagar Haveli	—	—	1	—	1	1
Delhi	34	2	241	1,175	1,452	1,442
Goa, Daman and Diu	7	—	6	17	30	31
Mizoram	2	—	4	2	8	8
Pondicherry	2	1	5	42	50	48
TOTAL	822	68	3,666	7,629	12,185	12,653

largest number of dailies (135) came from Uttar Pradesh, the smallest, one each, appeared from Andaman and Nicobar Islands, Himachal Pradesh, Meghalaya and Pondicherry. Table 10.4 shows the statewise and periodicitywise details of the number of newspapers at the end of 1974.

A language-wise study of newspapers shows that the largest number, 3,200 was published in Hindi, followed by 2,453 in English, 915 in Urdu, 739 in Bengali, 717 in Marathi, 569 in Gujarati, 527 in Tamil, 465 in Malayalam, 425 in Telugu, 331 in Kannada and 268 in Punjabi. Bilinguals numbered 989. Table 10.5 shows publication of newspapers at the end of 1974 language-wise.

TABLE 10.5
NUMBER OF PAPERS (LANGUAGE-WISE)

Language	Dailies	Ti-/Bi-weeklies	Week-lies	Others	Total 1974	Total 1973
English	83	6	291	2,073	2,453	2,493
Hindi	254	28	1,524	1,394	3,200	3,340
Assamese	3	1	8	20	32	38
Bengali	17	7	177	538	739	784
Gujarati	33	3	132	401	569	599
Kannada	52	2	112	165	331	332
Kashmiri	—	—	1	—	1	1
Malayalam	71	—	73	321	465	488
Marathi	79	8	231	399	717	739
Oriya	6	—	16	106	128	140
Punjabi	17	—	100	151	268	263
Sanskrit	1	—	2	19	22	23
Sindhi	5	—	18	36	59	67
Tamil	60	1	81	385	527	580
Telugu	16	—	119	290	425	405
Urdu	89	6	458	362	915	990
Bilingual	23	5	253	708	989	1,013
Multilingual	5	1	44	174	224	226
Others	8	—	26	87	121	132
TOTAL	822	68	3,666	7,629	12,185	12,653

Circulation of Newspapers

The data available for 1974 show that the newspapers had a circulation of 330.92 lakh copies compared to 352.70 lakhs in 1973. Out of 7,459 newspapers for which the publishers supplied circulation data, 7,113 or 95.5 per cent claimed a circulation of up to 15,000 copies per publishing day ('small' newspapers) and had a combined circulation of 150.79 lakhs or 45.6 per cent of the total. Another 243 newspapers having a circulation between 15,000 and 50,000 copies ('medium' newspapers) claimed a combined circulation of 65.26 lakhs or 19.7 per cent. However, 103 newspapers, having a circulation of more than 50,000 copies ('big' newspapers), together accounted for 114.87 lakh copies or 34.7 per cent of the total circulation of all the newspapers in India.

Newspapers published in the following languages commanded combined circulation exceeding 10 lakh copies: English 77.64 lakhs, Hindi 74.08 lakhs, Tamil 35.45 lakhs, Malayalam 26.02 lakhs, Marathi 20.77 lakhs, Gujarati 20.63 lakhs, Bengali 16.70 lakhs, Telugu 11.63 lakhs, Kannada 10.64 lakhs and bilingual 9.44 lakhs. Among the principal languages, Sanskrit newspapers had the lowest combined circulation (8,000 copies). The language and periodicity-wise break-up of the total circulation of 330.92 lakhs is given in Table 10.6.

TABLE 10.6 CIRCULATION (LANGUAGE-WISE AND PERIODICITY-WISE) IN 1974

(in thousands)

Language	Dailies	Tri-/Bi-weeklies	Weeklies	Other periodicals	Total
English	22,52	24	15,47	39,41	77,64
Hindi	17,23	36	24,10	32,39	74,08
Assamese	34	—	62	10	1,06
Bengali	5,38	5	3,93	7,34	16,70
Gujarati	7,57	31	4,68	8,07	20,63
Kannada	3,29	2	3,46	3,87	10,64
Kashmiri	—	—	—	—	—
Malayalam	10,84	—	7,55	7,63	26,02
Marathi	8,86	14	3,81	7,96	20,77
Oriya	90	—	9	80	1,79
Punjabi	66	—	2,44	1,85	4,95
Sanskrit	2	—	3	3	8
Sindhi	6	—	46	26	78
Tamil	8,00	—	14,47	12,98	35,45
Telugu	2,17	—	3,79	5,67	11,63
Urdu	3,98	9	6,40	5,91	16,38
Bilingual	31	7	3,12	5,94	9,44
Multilingual	1	—	36	1,44	1,81
Others	8	—	24	75	1,07
TOTAL	92,22	1,28	95,02	1,42,40	3,30,92

There were, in 1974, a total of 6,100 newspapers, which were also in existence in 1973. Described as 'common papers', their cirulcation registered a fall by 1 per cent in 1974. Language-wise, the highest increase, 7.5 per cent, was achieved by Punjabi papers, followed by 5 per cent in Kannada and 4.9 per cent in Oriya. Circulation data of common papers are given in Table 10.7.

TABLE 10.7 CIRCULATION OF COMMON PAPERS (LANGUAGE-WISE)

Language	Number of newspapers	Circulation ('000)		Increase/ decrease (per cent)
		1973	1974	
English	1,242	71,86	71,07	(—) 1.1
Hindi	1,529	67,06	66,41	(—) 1.0
Assamese	11	86	84	(—) 2.3
Bengali	350	14,92	14,44	(—) 3.2
Gujarati	341	19,48	19,93	(+) 2.3
Kannada	193	9,64	10,12	(+) 5.0
Kashmiri	—	—	—	—
Malayalam	221	25,18	24,45	(—) 2.9
Marathi	387	19,03	19,85	(+) 4.3
Oriya	48	1,62	1,70	(+) 4.9
Punjabi	122	3,87	4,16	(+) 7.5
Sanskrit	10	8	8	0.0
Sindhi	36	37	77	(—)11.5
Tamil	271	35,66	34,04	(—) 4.5
Telugu	216	10,10	9,87	(—) 2.3
Urdu	506	14,90	14,70	(—) 1.3
Bilingual	449	8,04	7,94	(—) 1.2
Multilingual	101	1,46	1,40	(—) 4.1
Others	67	98	92	(—) 6.1
TOTAL	6,100	3,05,61	3,02,69	(—) 1.0

Circulation Level

The highest circulation by a daily newspaper, taking only single editions into account, was attained by *Ananda Bazar Patrika* (Bengali), 2,68,403 copies, followed by *Malayala Manorama* (Malayalam), 1,99,543 copies. Circulation level of 22 dailies which commanded an average of more than one lakh copies each in 1974 is given in Table 10.8.

TABLE 10.8
DAILIES WITH CIRCULATION ABOVE ONE LAKH

Name, language and place of publication	Circulation 1974	1973
Ananda Bazar Patrika, Bengali, Calcutta	2,68,403	3,01,717
Malayala Manorama, Malayalam, Kottayam	1,99,343	2,07,045
Jugantar, Bengali, Calcutta	1,95,366	1,90,110
Nav Bharat Times, Hindi, New Delhi	1,90,525	1,85,357
Times of India, English, Bombay	1,77,289	1,76,895
Hindu, English, Madras	1,62,353	1,47,401
Hindustan Times, English, New Delhi	1,58,650	1,53,075
Mathrubhumi, Malayalam, Ernakulam	1,55,696	1,50,201
Hindustan, Hindi, New Delhi	1,52,044	1,56,829
Statesman, English, Calcutta	1,47,997	1,45,951
Lok Satta, Marathi, Bombay	1,43,927	1,45,620
Kerala Kaumudi, Malayalam, Trivandrum	1,34,305	1,40,210
Mathrubhumi, Malayalam, Kozhikode	1,24,913	1,25,091
Bombay Samachar, Gujarati, Bombay	1,16,146	1,13,180
Tribune, English, Chandigarh	1,15,523	1,14,850
Maharashtra Times, Marathi, Bombay	1,12,730	1,25,696
Amrit Bazar Patrika, English, Calcutta	1,10,563	1,08,230
Malayala Manorama, Malayalam, Kozhikode	1,07,805	1,08,768
Dinamani, Tamil, Madurai	1,05,246	1,17,500
Daily Thanthi, Tamil, Madras	1,02,617	96,757
Prajavani, Kannada, Bangalore	1,01,424	95,652
Gujarat Samachar, Gujarati, Ahmadabad	1,00,732	1,06,407

OWNERSHIP

A majority of the newspapers are owned by individuals. In 1974, out of 12,185 newspapers for which information was available, 7,449 or 61.1 per cent were under individual ownership, followed by societies and associations, which owned 2,282 or 18.7 per cent of the newspapers. The central and state governments together owned 450 or 3.7 per cent of the newspapers.

Newspapers owned by individuals commanded a circulation of 105.89 lakhs or 32 per cent, while 418 newspapers owned by public and private limited companies claimed a circulation of 125.45 lakhs or 37.9 per cent of the total circulation of all the newspapers in 1974. Table 10.9 gives the circulation data and ownership pattern of the newspapers.

TABLE 10.9
OWNERSHIP PATTERN

Form of ownership		1974 Number of papers	Circulation ('000)	Percentage to total circulation
Central government	..	124	515	1.5
State governments	..	51	154	0.5
Individual	..	4,357	10,589	32.0
Public companies	..	157	6,125	18.5
Private companies	..	261	6,420	19.4
Firms/partnerships	..	440	3,607	10.9
Trusts	..	232	1,614	4.9
Co-operative societies	..	77	171	0.5
Societies/associations	..	1,545	3,297	10.0
Educational institutions	..	145	320	1.0
International organisations	..	7	10	—
Political parties	..	63	270	0.8
TOTAL	..	7,459	33,092	100.00

Newsprint

The requirements of newsprint for the newspapers are met through the production of the National Newsprint and Paper Mills at Nepanagar in Madhya Pradesh and through imports. In 1974-75,

47,300 metric tonnes of Nepa newsprint and 1,31,160 metric tonnes of imported newsprint were allocated to newspapers.

The countries from which newsprint was imported were Bangladesh (7,000 tonnes), Canada (68,660 tonnes), Czechoslovakia (500 tonnes glazed), Japan (8,000 tonnes), Scandinavian countries (2,000 tonnes) and USSR (45,000 tonnes).

When the newsprint allocation policy was announced in June 1974, for the licensing year 1974-75, the firm availability of newsprint as on that day was only 1,32,950 tonnes against an estimated demand of 2.30 lakh tonnes based on the entitlement of newspapers in 1972-73. As a result of this a cut of 40 per cent in the newsprint quota of newspapers was imposed. At the same time, according to the announced policy, daily newspapers could, on an application, obtain 7 per cent of their entitlement in white printing paper.

The State Trading Corporation signed an agreement with the Soviet Union in July 1974, under which the latter agreed to supply 23,000 tonnes during 1974-75. This enabled a reduction in the cut by 10 per cent as the supply position improved.

Newsprint position was, however, quite favourable in 1975-76, Newspapers and periodicals were permitted unrestricted use of newsprint according to the newsprint policy for the year as amended on 27 September 1975. New newspapers were allowed an initial quota to cover a circulation of 5,000 copies of 8 standard pages. Total availability of newsprint was estimated at 2,16,000 metric tonnes including 55,000 tonnes to be supplied by the Nepa mills. However, further imports were suspended according to policy amendment notification dated 17 October 1975.

Press Laws

Three ordinances were promulgated on 8 December 1975 to effect changes in certain Press laws. One of the ordinances aims at repealing the Parliamentary Proceedings (Protection of Publication) Act 1956 and the second ordinance provides for a repeal of the Press Council Act 1965.

The Press Council was established in 1966 with the aim of evolving a code of conduct and bringing about a fusion of rights and responsibilities on the part of the Press. Since the objective had not been served, it was decided to repeal the Act.

The third ordinance, called the Prevention of Publication of Objectionable Matters Ordinance 1975, provides for action mainly against publications which are likely to excite disaffection against the constitutionally established government, incite interference with production, supply or distribution of essential commodities or services, create disharmony amongst different sections of the society and indulge in indecent, scurrilous or obscene writings. While providing for forfeiture of the publications for contravention of any prohibitory order, the ordinance also provides for opportunity of representation and appeal by the aggrieved party to the central government or the High Court.

Newsprint Advisor Committee

A newsprint advisory committee, first set up in July 1964, advises the government on import and allocation policy for newsprint and printing machinery. As re-constituted in 1975, the committee has the Minister of Information and Broadcasting as the chairman. Members include three nominees of the Indian and Eastern Newspapers Society, two nominees of the Indian Language Newspapers Association, six officials and nine other nominees of the govern-

ment. Non-official members hold office for two years from the date of appointment but can be re-appointed. The committee meets ordinarily twice a year.

Press Information Bureau

The Press Information Bureau disseminates information about the policies and programmes of the Government of India through the media of the press. It also keeps the government informed of the reaction to these policies as reflected in the press. PIB offices attached to the ministries issue press releases and feature articles, arrange press conferences and maintain contacts with the Indian and foreign correspondents and cameramen accredited to the Government of India. The PIB also co-ordinates publicity with the state governments and the public sector undertakings. It also maintains liaison with the External Publicity Division of the Ministry of External Affairs and supplies publicity material to Indian diplomatic missions abroad.

The Bureau's information material is issued in English, Hindi, and 13 other languages and is supplied not only to news agencies and journalists stationed in Delhi but also to the language press all over the country through its 28 regional and branch offices, which are linked by teleprinter circuits with the headquarters in Delhi. An extensive photo service caters to the needs of newspapers and journals which have block-making facilities, while 239 Urdu newspapers receive every week five 'charbas'—impression of a zinc block news photograph on a specially treated paper, which can be printed off without making a block.

For the benefit of small and medium newspapers, PIB provides special services like the weekly digest of news, short illustrated feature articles on diverse subjects, economic digest, agricultural newsletter, science notes, health and family planning newsletter and book reviews. Illustrated success stories covering development activities are also supplied to newspapers. In 1974-75, 63,153 press releases were issued, of which 16,160 were in English, 7,932 in Hindi and 39,061 in 13 other Indian languages.

A Central Press Accredition Committee advises the Bureau on accredition of press correspondents. Besides issuing publicity material, the Bureau assists these correspondents with facilities like housing, telephone, medical, travel and customs clearance. Three hundred and eighty Indian and foreign correspondents and about 100 cameramen are now accredited to the Government of India.

Information Centres

PIB runs Information Centres at New Delhi, Jullundur, Srinagar, Imphal and Aizawl. They provide reading room and library facilities and answer queries posed by the journalists and the public. Film shows are also arranged at these centres. Some of the state governments also maintain Information Centres at New Delhi and elsewhere. In addition, there are Information Centres maintained by certain central departments.

Wall Newspaper

A single-sheet weekly wall newspaper, 'Hamara Desh', which is being edited by PIB (launched in 1970) is published in English, Hindi, Urdu, Bengali, Khasi, Malayalam, Tamil and Marathi. It projects the country's achievements and progress in various fields. Copies are displayed at key points in government and private sector offices, railway stations, canteens, schools and other places, particularly in remote areas.

News Agencies

Press Trust of India (PTI), United News of India (UNI), Samachar Bharati and Hindustan Samachar, — the four principal news agencies of India, decided in early 1976, to merge voluntarily into a single national news agency so as to function effectively and purposefully.

The Government of India welcomed the decision and offered to help in the process taking into consideration the need for having a single strong news agency to be able to operate effectively both at the national and international levels. The new agency is expected to expand so as to cover all areas, specially rural areas and all relevant fields of activity, in accordance with well accepted national goals.

With the merger, the principal news agencies in the country will be free from the control of the vested interests including monopoly houses which owned them. Both PTI and UNI belonged to big newspapers several of whom were controlled by business houses which had failed to provide resources necessary for development of a creative, all pervasive and efficient network needed for collection and dissemination of news. The share-holder newspapers were paying to the agencies only 1.5 per cent of their total production cost. As a result, not only the coverage of internal news was inadequate but the projection of Indian news abroad was very poor. While Indian news agencies accounted for an outflow of not more than 1,500 to 2,000 words a day, the foreign news agencies were pumping in anywhere between 25,000 and 50,000 words a day into India.

With effect from 1 February 1976 all news coverage by the four news agencies has been under a common bye line of Samachar. On 24 January 1976 a Society named Smachar was registered under the Societies Registration Act. The managing boards of the four news agencies have entered into agreements with the Samachar under which they would, for the present, perform all functions on behalf of the Samachar, pending further integration. It is hoped that these developments would result in the creation of a strong and well-equipped news agency for the country, and these efforts would lead to the emergence of a national agency which can adequately fulfil the role of a news-medium befitting the size, the complexity and the richness of activities in the country.

Of the four principal news agencies which have opted for merger the PTI and the UNI supplied news in English. The other two were operating through the medium of Hindi and other Indian languages. PTI started its operations in 1949 after taking over Reuters' business in India as well as the interests of the Associated Press of India. In 1975 it had about 400 subscribers—195 press, 109 commercial and 96 others. It had over 45,000 km of teleprinter lines to connect its 63 bureaux all over India and its offices in Dacca and Colombo. The UNI which started its operations in 1961 had over 50 branch offices located at all the important state capitals and other important news centres. It had a network of 40,000 km of leased teleprinter lines and had installed some 400 teleprinters for transmitting news. Both the agencies mostly depended upon arrangements with foreign international news agencies for collection of news from abroad. Samachar Bharati and Hindustan Samachar mainly served the language press.

Apart from the four merging major news agencies, there are a number of news-*cum*-feature agencies and regional news services which supply news, features and background material to Indian newspapers. Important among these are: India News and Feature Alliance (INFA); Press Asia International; India Press Agency (IPA); Enterprise News and Features, Vikrant News Service, Foreign News and

Features, Cartographic News Service, New Delhi and National News Service, Delhi.

Among the foreign news agencies which have set up bureaux in India for news gathering are: Agence France-Press (France): Economic News Service (Hong Kong); Associated Press (America); Bangladesh Sangbad Sangstha, Dacca (Bangladesh); Czechoslovak News Agency; ANSA (Italian News Agency); Romanian News Agency, Bucharest (Rumania); Iraqi News Agency, Baghdad (Iraq); Kyodo News Service, Tokyo (Japan); Polish Press Agency (Poland); Reuters (UK); Tanjug Yugoslav Press Agency (Yugoslavia); Tass, Moscow (USSR); United Press International (USA); Novoŝti Press Agency (USSR); World Feature Services Ltd., London (UK); and ADN—Allgemeiner Deutscher Nachrichtendienst—(German Democratic Republic). Some of these agencies have entered into agreements with PTI or UNI for the exchange of news.

Press Associations

The Indian and Eastern Newspaper Society, founded in 1939, is a representative body of newspapers and has a membership of 282. It concerns itself largely with the members' business interests incidental to the production of their publications and grants accredition to advertising agencies. The All-India Newspaper Editors Conference, founded in 1940, has 293 members and looks after the interests of the editorial section of the newspaper industry. The Indian Languages Newspapers Association represents 271 newspapers and periodicals published in various Indian languages. Trade unions of working journalists in Delhi and 16 states have an apex body called the Indian Federation of Working Journalists. Other prominent trade and professional associations include the National Union of Journalists (India), the Press Association and the Association of Indian News Agencies.

FILMS

Feature films are being produced in India since 1912-13. While R.G. Torney produced 'Pundalik' in 1912, Dada Saheb Phalke produced 'Raja Harishchandra' in 1913. The era of silent films was overtaken by the talkie era in 1931 when Ardeshir Irani produced 'Alam Ara'. Over the years, more than 12,260 feature films have been produced in India which now leads the world in the annual output of feature films. In 1974, 435 feature films were produced, 210 of them in colour. Bombay, Calcutta, and Madras are the most important centres for the making of films. In 1974, 141 films were produced in Bombay, 42 in Calcuttta and 252 in Madras. The number of feature films produced in various languages and certified for public exhibition for selected years since 1947 is shown in Table 10.10.

As many as 2,264 short films, including 1,437 films in 35 mm, 826 films in 16 mm and 1 film in 8 mm were also certified for public exhibition in 1974.

Films are produced on various themes. Social subjects, however, predominate and 268 films in this category were certified in 1974. Table 10.11 gives the thematic classification of feature films certified for public exhibition from 1969 to 1974.

Documentaries and Newsreels

Weekly Indian News Review, cartoon films, quickies and documentaries required for public information, education and instruction are produced by the Films Division of the Ministry of Information and

TABLE 10.10

OUTPUT OF FEATURE FILMS

Language	1947	1951	1956	1961	1966	1967	1968	1969	1970	1971	1972	1973	1974
Assamese	—	—	3	2	2	2	1	2	3	5	7	8	3
Arabic	—	—	—	—	—	—	2	—	—	—	—	—	—
Bengali	38	38	54	36	30	25	29	29	33	30	25	35	36
Dogri	—	—	—	—	1	—	—	—	—	—	—	—	—
English	—	—	—	—	—	—	—	—	1	1	3	1	1
Gujarati	11	6	3	7	2	3	3	6	5	3	4	5	7
Hindi[1]	186	100	123	109	108	85	74[2]	100	104[3]	121[4]	134[5]	141[7]	136[8]
Kannada ..	5	2	14	12	21	24	36	44	38	33	20	32	30
Kashmiri ..	—	—	—	—	—	—	—	1	—	—	—	—	—
Konkani ..	—	—	—	—	—	1	—	1	1	1	—	—	—
Malayalam ..	—	7	5	11	31	39	36	31	43	52	47	60	54
Marathi ..	6	16	13	15	12	20	17	16	19	23	13	14	11
Nepali ..	—	—	—	—	1	—	1	—	—	—	—	—	2
Oriya ..	—	—	2	2	2	2	3	2	—	1	1	2	1
Punjabi ..	—	4	—	5	4	5	2	4	2	2	3	5	4
Sindhi ..	—	—	—	—	1	1	1	2	—	1	1	1	—
Tamil ..	29	26	51	49	60	65	68	70	76	73	77	66	79
Telugu ..	6	30	27	55	41	61	77	59	71	85	73	74	69
Tulu ..	—	—	—	—	—	—	—	—	—	2	2	4	2
TOTAL ..	281	229	295	303	316	333	350	367	396	433	414[6]	448	435

[1]Includes Urdu, Rajasthani and Hindustani films.
[2]Includes three children's films and two Hindi films with English sub-titles.
[3]Includes one Hindi film with sub-titles in French.
[4]Includes one Bhojpuri, 14 Hindustani, one Maithili, one Chhatisgarhi and four Urdu films.
[5]Seven of these films were in Hindustani.
[6]The total includes one film in Coorgi, two in Manipuri and one in Thai language.
[7]Includes one Haryanavi, one Rajasthani, two Urdu and one Hindustani films.
[8]Includes one Haryanvi film.

TABLE 10.11
THEMATIC CLASSIFICATION

Theme		1969	1970	1971	1972	1973	1974
Social	..	238	254	283	273	305	268
Crime	..	64	80	83	82	102	98
Fantasy	..	11	13	8	9	1	5
Historical	..	2	2	5	2	5	4
Biographical	..	3	3	2	3	1	2
Mythological	..	17	18	16	16	19	27
Legendary	..	27	18	12	5	5	13
Devotional	..	3	1	8	6	8	14
Children	..	—	7	13	2	1	1
Stunt	..	2	—	1	6	—	—
Adventure	..	—	—	—	3	—	—
Political	..	—	—	1	2	—	—
Documentary	..	—	—	1	4	1	2
Horror	..	—	—	—	1	—	—
Scientific and Technical		—	—	—	—	—	1
TOTAL	..	367	396	433	414	448	435

Broadcasting. The Division was set up in 1948 and has produced more than 3,000 films. Through its annual production of nearly 120 short films (including four cartoon films), 52 national newsreels and 52 regional newsreels, the Division has been recording the contemporary history of India and presenting filmic reports on the socio-economic progress of the country. Most of the films are produced in English and 14 regional languages.

Important newsworthy events within and outside India are included in the weekly national newsreels. The Films Division has exchange arrangements with 21 foreign newsreel organisations for free exchange of important international news events. Eighteen newsreel cameramen stationed at various centres in India cover important news events. News events are also filmed by stringers of state government film units. At present, the Division releases one newsreel per region in a month. The cartoon film unit of the Division produces cartoons by using a variety of techniques.

Every cinema house in India is required, under the terms of its licence, to exhibit at each performance not more than 609 metres of 'approved films' supplied by the Division on a rental of 1 per cent of the average weekly collections. One newsreel and two short films are released every week at important centres. These are then rotated to cinema houses at other places in the country. In 1974-75 the Division earned Rs 156 lakhs by way of rentals from cinema houses. 7,012 prints were supplied free of charge to various publicity units.

The Division also supplies prints on loan to government departments, semi-government bodies, educational and charitable institutions, hospitals, social welfare organisations and individuals through its seven distribution branch offices, as well as through the Regional and Field Publicity Units of the Directorate of Field Publicity, for non-commercial shows free of charge.

Documentaries considered suitable for exhibition abroad are supplied regularly to 80 Indian Missions abroad and to 27 other Missions on demand. Besides the regular arrangements for screening of its documentaries and newsreels in cinema houses in Bhutan, Fiji Islands, Mauritius and Nepal, the Division has entered into arrangements for distribution of selected films to cinemas houses and for television in Europe, Latin American countries, Australia, New Zealand, Pacific and Fiji islands.

In 1974-75, the Division produced 113 (87 B & W and 26 colour

documentary films through its own units and 22 (13 B & W and 9 colour) films were produced through outside producers. The Division released 144 new documentary films and 196 newsreels during the year. They included 100 documentary films, 52 national newsreels, 51 regional newsreels, 16 special newsreels produced by the Division and 44 documentary films and 77 newsreels produced by the State governments. The Division makes available its own circuits either on all-India basis or in respective regions to State governments for their documentaries and newsreels. The Division participated in 35 international festivals and won 11 awards. The films which received the festival awards were: (1) Bundi—A Reminiscence (2) Lost Child (3) Wild life of India (4) 1002 A.D. Khajuraho (5) Land of Krishna (6) The City that Jaisal Built (7) Man, Machine and Man (8) The Flame Burns Bright (9) Homi Bhabha—A scientist in action (10) Rhythm of Kerala (11) The Nomad Puppeteer.

Censorship

Films can be exhibited in India only after they have been certified by the Central Board of Film Censors. The Board, set up under the Cinematograph (Censorship) Act of 1952, consists of nine members and a Chairman, all of whom are appointed by the Government of India. The headquarters of the Board is at Bombay with regional offices at Bombay, Calcutta, and Madras. The regional offices are assisted in the examination of films by advisory panels, the members of which are appointed by the government and include educationists, lawyers, social workers and others.

The Board examines the films and grants a 'U' certificate for unrestricted public exhibition or an 'A' certificate for exhibition restricted to adults (above the age of 18 years). The Board may direct the applicant to carry out excisions or modifications before granting the certificate. It may also refuse the certificate if the film or any part of it is against the interest of the security of the State, friendly relations with foreign states, public order, decency, morality or involves defamation or contempt of court or is likely to incite the commission of an offence. Whenever any deletions are ordered, their particulars are notified in the Gazette of India. The applicants can appeal to the Government of India within 30 days of an order of the Board.

In 1974, the Board granted 'U' certificates to 1,705 Indian and 945 foreign films. 'A' certificates were granted to 8 foreign and 41 Indian films. Eleven films, 4 foreign and 7 Indian, were refused certificates. Besides 908 films were classified as 'predominantly educational'. The Board has taken steps to curb depiction of violence and vulgarity in films.

Exhibition Facilities

There has been a steady growth of exhibition facilities for showing films in the country. The estimated number of seats in the cinemas (permanent and touring) at the end of 1972-73 was 49,27,000. Table 10.12 gives the number of cinemas in 1965-66, 1969-70 and from 1971-72 to 1974-75.

TABLE 10.12
NUMBER OF CINEMAS

Cinemas	1965-66	1969-70	1971-72	1972-73	1973-74	1974-75
Permanent	3,889	4,482	4,787	5,139	5,304	5,468
Touring	1,740	2,505	2,801	2,659	2,932	3,266
TOTAL	5,629	6,987	7,588	7,798	8,236	8,734

Film Finance Corporation

The Government of India set up the Film Finance Corporation in March 1960. Its authorised capital is Rs 1 crore, of which Rs 50 lakhs now constitutes the issued capital, wholly subscribed by the government. The government has also given a loan of Rs 1 crore of which Rs 12.5 lakhs have been set apart for exhibition activities and Rs 5 lakhs for distribution activities contemplated by the Corporation. As on 31 March 1975, the Corporation had paid back a sum of Rs 18 lakhs. Up to 31 March 1974, the Corporation had advanced loans totalling Rs 2.30 crores for the production of 86 feature films and 27 documentary films, in full or part, out of loans of Rs 2.48 crores sanctioned for 93 feature films and 27 documentary films.

In tune with the objectives of the Corporation the emphasis for the grant of loans has shifted from box-office formulae to more valid cinematic values.

The Corporation plans to have its own exhibition set up. Construction of art cinemas at different centres is contemplated. Festivals in FFC films are also being organised.

The Corporation has also been engaged since November 1973 in the distribution of raw film and the canalisation of export of films. It earned a commission of Rs 37 lakhs upto 31 March 1975 on this account.

Children's Film Society

Films for the children are produced mainly by the Children's Film Society. It was set up in May 1955 as an autonomous body registered under the Societies Registration Act, 1860 to undertake, aid, sponsor, promote and co-ordinate the production, distribution and exhibition of films suited for children and adolescents. In the last 20 years, it has produced 90 films including 42 feature films besides shorts, cartoons and puppet films. Of these, 12 films have won national and international awards. The expenditure of the Society is largely met from grants-in-aid given by the Central Government though it also earns revenue through affiliate membership fee realised from the state governments and union territories, sale of prints, commercial film shows and hire charges of 16-mm films.

The films of the Society are regularly shown at Bombay and New Delhi and are telecast from the TV centres. Many schools, social welfare centres and industrial establishments are the members of the Society and regularly borrow films from the 16-mm library of the Society for screening at their premises for the benefit of children. Nearly 4,250 non-commercial shows were organised by the Society in 1973-74. An International Retrospective Children's Film Festival was also organised in May/June 1974 at Delhi, Madras, Bombay, Bangalore and Calcutta.

National Awards for Films

The national awards for films, called state awards till 1966, were instituted in 1953 for promoting India's film art by acknowledging outstanding achievements in different departments of film-making. These annual awards are now given under a new National award scheme. Kamal (lotus) is the symbol as adopted under this new scheme which came into effect in 1975; 'Kamal Puraskars' (lotus awards) have replaced the earlier President's medals. The awards consist of the Gold Lotus, the Silver Lotus and the Bronze Lotus. While the first two are for different categories of films, the Bronze Lotus is given to the leading actor and actress of the award winning films.

While the Dadasaheb Phalke Award is decided by the Government of India, entries for the National Awards are examined by the two

national juries—one for the feature films and the other for the short films. These juries examined 63 feature films and 117 documentaries and short films for the twenty-second National Film Festival. Shri Mrinal Sen's 'Chorus' (Bengali) was adjudged the Best National Film and awarded 'Swarna Kamal' (Gold Lotus). Shri Shyam Benegal's 'Ankur' (Hindi) was adjudged as the second best feature Film and awarded 'Rajat Kamal' (Silver Lotus). Sadhu Meher and Shabana Azmi won the Best Actor and the Best Actress awards for their performance in 'Ankur'. Film 'Parinay' (Hindi) was adjudged the best feature film on national integration. The Malayalam feature film "Uttarayanam" and the short film 'I' have won the special awards instituted for this year to mark the occasion of the 25th anniversary of India's Independence. The Telugu cine director Sri B.N. Reddy was selected for the Dadasaheb Phalke Award.

The scheme now covers 25 categories consisting of all-India and regional awards. The regional awards are meant for films produced in the principal languages of the country.

DIRECTORATE OF FILM FESTIVALS

The Directorate of Film Festivals, set up by the Ministry of Information and Broadcasting in May 1973, implements the scheme of National Awards and regulates India's participation in international film festivals. It also organises festivals of foreign films in India and of Indian films abroad under bilateral cultural exchange programmes.

Film Festivals

India participated in 40 international film festivals in 1974-75. The following Indian documentaries and short films received awards at various international film festivals: (1) '*Lost Child*'—special award for photography at the 11th International Television Festival held at Prague. (2) A set of four documentaries *viz.*, 'Khajuraho—1002 A.D.' 'Land of Krishna', 'Bundi'—a reminiscence' and 'The city that Jaisal built', won a special award at the 7th International Festival of Tour-film at Spindle-ruve Mlyn (Czechoslovakia), (3) 'Man, Machine and Man' was awarded the Garnet Grand Prix at the 12th 'National Competition Review of Technical, Scientific and Instructive films held in Pardubic (Czechoslovakia); (4) 'Rhythm of Kerala' was given the award for the best documentary at the International Film Festival held in Panama and (5) 'Bundi—a reminiscence' was awarded a distinction at the 11th International Festival of short films held in Cracow, Poland and also a diploma of participation at the 17th International Leipzig Documentary and Short Film Festival for cinema and television.

India's cultural agreements with other countries promote reciprocal film festivals. In 1974-75, festivals of films from Bangladesh Italy, Mongolia and Poland were held in Delhi and some selected cities of India. Indian Film Festivals were held in Australia, New Zealand, Indonesia, Democratic Republic of Vietnam, Bangladesh and Sri Lanka.

National Film Archive of India

The National Film Archive of India was established in 1964 with the primary objective of acquisition and preservation of national and international cinema; film classification, documentation and research and encouraging film study and spread of film culture. Its collection on 31 March 1975, totalled 1,183 titles consisting of 841 Indian and 342 foreign films. It also has ancillary film material of more than 5,150 books, 160 magazines, 3,280 shooting scripts, 8,140 photographic stills, 2,160 wall posters and 960 disc records.

Important Indian films acquired during 1974-75 included Bengali —'Chandidas' (1932); Hindi—'Nirmala' (1938), 'Watan' (1938), 'Navajeevan' (1939) and 'Chota Bhai' (1949); Marathi—'Maza Mulga' (1938), 'Ardhangi' (1940), 'Chhatrapati Shivaji' (1952), 'Dev Pavala' (1954), and 'Shantata Court Chalu Ahe' (1971); Urdu—'Judgment of Allah' (1935); Tamil—'Gnana Sundari' (1941); and, Kannada—'Satya Harishchandra' (1943). Prints of 9 films, which won the National Awards for 1973, have also been deposited with the Archive.

The Archive is a member of the International Federation of Film Archives. This enables the NFAI to exchange films with foreign archives. In 1974-75, 12 Czechoslovak, 10 Polish, 9 Yugoslav, 5 American, 3 Japanese, 2 Italian, 1 Russian and 1 Swedish films were acquired through purchase and exchange arrangements. These included the major works of directors like Jiri Menzel, Andrez Wejda, Jerzy Kawalerewicz, Krzystoff Zanussi, Dusan Makavejev, Charles Chaplin, Buster Keaton, Akira Kurosawa, Nagisa Oshima, Michelangelo Antonioni and Luchino Visconti.

A monograph on Guru Dutt, the second in the series of film pioneers, was brought out in 1974-75.

As part of the screen education activities refresher courses in film appreciation are conducted.

The Archive maintains a distribution library of 85 films (Indian and foreign), which are loaned to film societies and others for non-commercial study screenings.

Exports

Indian films are exported to nearly 90 countries of the world. The traditional markets are the Gulf countries, Canada, East Africa, Fiji, Indonesia, Iran, Malaysia, Mauritius, Singapore, Sri Lanka, Thailand, UK, USA, West and North Africa, and West Indies. Among the non-traditional markets, USSR has emerged as an important buyer. The demand is mainly for Hindi and Tamil films. During 1973-74 export earnings amounted to Rs 5.58 crores.

Export was previously undertaken by merchant-exporters and producer-exporters. In the public sector, the Indian Motion Pictures Export Corporation was set up in September 1963 with a share capital of Rs 25 lakhs subscribed both by the industry and the government. IMPEC became a subsidiary of the State Trading Corporation of India in April 1967 and was placed under the control of the Ministry of Information and Broadcasting in October 1973. The export of feature films was canalised through the State Trading Corporation in August 1972 and through the Film Finance Corporation in October

TABLE 10.13 CINE FILM AND EQUIPMENT IMPORTS

Year	Unexposed sensitized film in rolls		Exposed cine film (whether developed or not)		Sound recording equipment	Projection equipment[1]
	Quantity (*lakh metres*)	Value (*Rs lakhs*)	Quantity (*lakh metres*)	Value (*Rs lakhs*)	Value (*Rs lakhs*)	Value (*Rs lakhs*)
1969-70	614.12	473.10	22.55	31.15	2.14	31.37
1970-71	777.86	532.59	23.30	36.68	1.91	1,70.39
1971-72	911.84	638.69	15.19	29.01	2.03	21.77
1972-73	831.45	641.08	23.57	29.38	2.87	39.85
1973-74	686.46	627.42	11.44	18.37	8.43	34.25
1974-75 (up to Feb.)	566.65	582.08	10.74	19.33	3.86	42.85

[1] Includes value of parts and accessories of cine cameras, projectors etc., for which separate figures are not available.

1973. The government have decided to set up a National Film Development Corporation, which will be a multi-functional body in the public sector to handle import and export, distribution and exhibition of feature films and undertake allied functions.

Cine Film and Equipment

Cinematographic film and equipment are also imported to meet the requirements of the film industry. These imports were valued at Rs 6.9 crores in 1973-74. Table 10.13 shows the quantity and value of imports for the last six years.

PUBLICATIONS

Publications Division

The Publications Division of the Ministry of Information and Broadcasting was set up in 1941 as the foreign branch of the Bureau of Public Information. It acquired its present name and separate identity in 1944. It produces books, pamphlets, pictorial albums and journals in Hindi, English and major regional languages with the main objective of educating and informing the public through the print media. Till April 1975, it had brought out 4,784 such publications. They represent a wide spectrum of national life and endeavour.

Alongside publications on art and culture, history and tradition, political evolution and democratic processes, economic development and social resurgence, the Division also brings out books on science and technology. Under its 'Builders of Modern India' series, the Division has released 40 biographies of eminent Indians who have made valuable contribution to national renaissance. Under the 'States of Our Union' series, which seeks to introduce the people of each state to the others, 16 titles have been published. The Division's books on art and culture include the 'Heritage of Indian Art' and 'An Introduction to Indian Music'. Selected speeches and writings of Presidents, Vice-Presidents and Prime Ministers have also been published.

The Division brings out 17 journals of varying periodicity. 'Yojana', a journal devoted to planning, is brought out in Assamese, Bengali, English, Gujarati, Hindi, Malayalam, Marathi, Tamil and Telugu. 'Bal Bharati' (Hindi) is produced for children while 'Ajkal' (Hindi and Urdu) serves the cultural needs of adult readers. Other journals include the 'Indian and Foreign Review' and 'Kurukshetra.'

The books and journals are sold through booksellers and the Division's own sales emporia, while publicity literature is distributed free to selected targets. As a plan scheme, the Division has undertaken to make available to the public, under one roof, the publications brought out by the Division and other Ministries and Departments of the Government of India, State Governments and autonomous organisations, by opening sales emporia in metropolitan cities. The sales emporium in Super Bazar at New Delhi was opened on 1 May 1974. During the period from May to December 1974, the emporium sold over 3,55,000 copies of the various publications, thereby fetching a revenue of over Rs 9 lakhs, as against the annual sales target of 4 lakhs envisaged under the scheme.

ADVERTISING AND VISUAL PUBLICITY

Directorate of Advertising and Visual Publicity

The Directorate of Advertising and Visual Publicity is the central agency of the Government of India for undertaking mass advertising and visual publicity campaigns on behalf of the various ministries,

departments and autonomous bodies under the government through press advertisements, printed publicity material like folders, leaflets, brochures and booklets, outdoor publicity items like hoardings, panels and metallic tablets and radio 'spots'. Policies and programmes of the government are also publicised through photographic exhibitions. Radio advertising for the nationalised banks is also undertaken by the DAVP. The Directorate has 34 field exhibition units, most of them at state capitals, including five mobile vans and two exhibition coaches. In 1974, 784 exhibitions were organised. Special campaigns were also organised in the wake of national emergency declared on 25 June 1975 and the 20-Point Economic Programme announced by the Prime Minister.

The multi-media national campaigns of the Directorate are launched to inform and educate the people on matters of immediate and long-term interest. While some of the major campaigns aimed at seeking public support for checking hoarding and adulteration of foodgrains, other campaigns sought to motivate the people for family planning, small savings, community development, industrial projects in rural and backward areas and the promotion of exports.

Government Advertisements

Advertisements of all the ministries and departments of the Government of India, excluding railways, are released to the press by the DAVP. While selecting newspapers for these advertisements, special consideration is given to medium and small newspapers. To qualify for government advertisements, a newspaper must have regular periodicity, uninterrupted publication for six months and a paid circulation of not less than 1,000 copies. It is also required to maintain accepted standards of production and journalistic ethics.

Awards for Printing and Designing

The Directorate organises every year the 'National Awards for Excellence in Printing and Designing', in order to generate healthy competitive endeavours for higher standards in printing and layout. In the 17th Awards, announced in 1975, in all, 133 awards were given to 84 winners under 32 categories.

FIELD PUBLICITY

The Directorate of Field Publicity, set up in 1953, reaches the people through its 212 field units and 17 regional offices and seeks public support for national campaigns on planned development, family planning, national integration and defence preparedness. The mobile units organise film shows, publicity meetings, seminars, song and drama programmes including 'harikathas' and 'qawalis' and distribute publicity literature. Extension of publicity work into the remote and hilly border areas, rarely covered, receive special attention in field publicity programmes. The units reach such areas even through foot marches, transporting the equipment manually. In 1975 the various units publicised the 20-Point Programme announced by the Prime Minister and the various steps taken to implement it. In 1974, nearly 1,07,000 film shows and more than 9,600 song and drama programmes were organised at various places in the country. Various mass media techniques are adopted keeping in view the special requirements, of the region to convey to the people the message so as involve them in the developmental process. Selected opinion leaders from border and far-flung areas are taken on conducted tours to centres of developmental and cultural interest with this objective

in view and by way of promoting national integration.

The Directorate gathers public reaction to government policies and programmes and feed back reports are sent to the government. Success stories about people's participation in development programmes are reported to the various mass media units like AIR, PIB and the Publications Division.

EXTERNAL PUBLICITY

The External Publicity Division of the Ministry of External Affairs explains and interprets the policies of the Government of India to foreign audiences. It supplies publicity material to Indian Missions abroad for distribution. For quick transmission of developments at home, it maintains teleprinter link with 63 Missions, while material received from them is issued to the Indian press. Under the cultural exchange programmes, Indian journalists are sent abroad, while foreign journalists are provided with facilities in India. In 1974-75, 110 Indian journalists were sent abroad, while 121 foreign journalists were invited to India to cover development projects. In 1973-74 1,050 prints were supplied to Indian Missions abroad in connection with foreign publicity.

PHOTO SERVICE

The Photo Division of the Ministry of Information and Broadcasting caters to the requirements of photographs for internal and external publicity. The Division has a large collection of photographs, both in colour and black and white, on various development projects, industries, agricultural advancement and on places of tourist interest.

The Photo Division, incidentally, is the biggest production unit of its kind in the country. With the help of the newly acquired PAKO automatic photo printing machine, it can turn out 1,500 enlargements per hour. It also has sophisticated equipment for preparing big colour transparencies and colour photographs.

Details of the number of assignments covered, negatives handled and prints made in 1974-75 are: news and feature assignments (in black and white) 3,268; black and white prints made 4,66,874; negatives handled 1,12,089; colour films processed 148; colour prints made 665.

SONG AND DRAMA

The Song and Drama Division of the Ministry of Information and Broadcasting, established in 1954, has become the biggest live-entertainment organisation. Through its seven departmental drama troupes, 28 troupes on the international border and 9 troupes of the Armed Forces Entertainment Wing, the Division presents various types of programmes for the masses, which include both rural and urban people, tribal people in interior-most areas and especially the Armed Forces personnel posted in forward areas. The programmes create an awareness of the social, economic and democratic ideals cherished by the nation. In addition to these troupes, private parties/artistes, registered by the Division from all over India, conduct different types of programmes through the Division's regional centres and the offices of the Directorate of Field Publicity.

In 1969, the Division created Theatre Panosonic—a Sound and Light spectacle with live action by a large number of artistes, which

can be witnessed from different angles by thousands of people at a time. A special programme in the medium, 'Badhte Qadam 'prepared on the occasion of the 25th Jayanti of Indian Independence, is being shown at various places.

A new programme of screening popular feature films at nominal rates in the prestigious open air theatre, Ravindra Rangashala, in New Delhi, was started in 1974. This is a pioneering step in the open air cinema movement in the country for providing healthy entertainment to the people.

RESEARCH AND REFERENCE

The Research and Reference Division of the Ministry of Information and Broadcasting studies in depth problems of national significance and provides reference service to the media units of the Ministry of Information and Broadcasting and others. The Division's regular services include 'Background to the News' and research papers on matters of topical interest. A new service is 'data bank' bulletin which provides source materials of information on select publicity topics to various media units. The Division also compiles 'India—A Reference Annual' which is a standard work of reference and provides objective and authentic information on diverse aspects of national life and activities in India. In 1973-74, the Division compiled a 'National Directory of Information Organisations' which provided information about media organisations of the central and state governments.

A National Documentation Centre in Mass Communication is being set up as part of the Research and Reference Division with the broad objective of collecting and disseminating information relating to mass communication studies and problems. Two new services started by the Division in 1976 are: (i) Vital statistics and basic facts and (ii) Diary of forthcoming events.

During 1975, the Division brought out more than 75 backgrounders and research and reference papers on various subjects. Among them were papers relating to the 20-Point Economic Programme announced by the Prime Minister.

MASS COMMUNICATION TRAINING

Training in mass communication subjects is given by a number of institutions in the country. Among the Universities which offer degree/diploma courses in journalism are the Universities of Banaras, Calcutta, Gauhati, Jabalpur, Madras, Mysore, Nagpur, Osmania, Pune and Punjab. The Punjab Agricultural University at Ludhiana has M.Sc. course in journalism for science graduates.

Staff Training

Training in radio broadcasting is conducted by the All India Radio. Its Staff Training Institute (Programmes) gives training in planning and production of spoken word programmes, programme administration, audience research and allied topics. Foreign trainees also benefit from them. Orientation courses in TV and refresher courses on the maintenance aspects of audio and video tape recorders, TV film technology etc. are also conducted on the technical side.

Film and Television Training

The Film and Television Institute of India, set up at Pune in 1960, by the Ministry of Information and Broadcasting, and the Government of Tamil Nadu's Institute of Film Technology at Madras offer training

courses in the art and craft of film-making. The FTII became an autonomous body in October 1974. It offers three-year courses in film direction, screenplay writing, motion picture photography, sound recording and sound engineering, and two-year courses in film editing and film acting.

The Television Training Centre, which was set up by the Government of India in 1971, trains man-power required for the expanding TV network in the country. Originally set up in Delhi, it later shifted to Pune.

Indian Institute of Mass Communication

The Indian Institute of Mass Communication was set up by the Ministry of Information and Broadcasting in August 1965 as a centre for study and research in mass communication. It has been an autonomous body since January 1966 and is equipped to provide practical instruction in various media of mass communication. The Institute has seven faculties: developmental communication; print medium; radio, television and speech communication; visual communication; advertising and campaign planning; traditional media; and, communication research. The regular training courses are: (1) a sixteen-month basic professional course for the probationers of the Central Information Service, (2) a eight-month post-graduate diploma course in journalism for foreign scholars with journalistic background from developing countries as well as for Indian aspirants, who seek to make it their career and (3) a three-month in-service basic course (three each year) in multi-media operations for intermediate level personnel of the Central and State Information, Publicity and Public Relations departments and public undertakings.

Realising the importance of the Indian language press, a beginning was made in 1974-75 with workshop training in Hindi and Urdu journalism. A course in pictorial journalism dealing with photography has also been started.

EVALUATION

A Directorate of Evaluation has been set up under the Ministry of Information and Broadcasting to study the relative reach, cost and impact of the various media and to conduct surveys aimed at providing information necessary for programme improvement, policy planning and better cost-effectiveness. A Department of Evaluation Studies in the Indian Institute of Mass Communication, headed by a Visiting Professor, serves as a base for initiating and coordinating evaluation studies of both immediate consequence and long-range interest to the Ministry of Information and Broadcasting as well as to other Ministries of the Government of India.

NOTE: Radio stations listed on page 113 are as on 15 July 1975.
The three ordinances referred to on page 127 have subsequently been replaced by Bills, passed by Parliament in February 1976.

11 ECONOMIC STRUCTURE

India is rich in natural resources and man-power. These resources have, however, not been exploited fully and are capable of greater utilisation. The Indian economy is still predominantly agricultural, about half of the country's national income is derived from agriculture and allied activities which absorb nearly three-fourths of its working force. Since 1947, the aim has been to diversify the economy by accelerating the pace of industrial development, increase agricultural productivity and achieve all-round progress under the national plans.

NATIONAL AND PER CAPITA INCOMES

National income in India is defined as the sum of incomes accruing to factors of production supplied by normal residents of the country before deduction of direct taxes. It is identically equal to net national product at factor cost. Table 11.1 gives the estimates of national and per capita incomes for selected years since 1960-61 at current and 1960-61 prices, as compiled by the Central Statistical Organisation.

TABLE 11.1
NATIONAL AND PER CAPITA INCOMES AT FACTOR COST

Item	1960-61	1970-71[1]	1971-72[1]	1972-73[1]	1973-74[2]
Net national product (Rs crores)					
at current prices	13,267	34,627	36,599	39,592	49,290
at 1960-61 prices	13,267	19,035	19,299	19,130	19,724
Per capita net national product (Rs)					
at current prices	305.7	640.1	660.6	698.3	849.8
at 1960-61 prices	305.7	351.8	348.4	337.4	340.1
Index number of net national product with 1960-61 as base					
at current prices	100.0	261.0	275.9	298.4	371.5
at 1960-61 prices	100.0	143.5	145.5	144.2	148.7
Index number of per capita net national product with 1960-61 as base					
at current prices	100.0	209.4	216.1	228.4	278.0
at 1960-61 prices	100.0	115.1	114.0	110.4	111.3
Gross national product (Rs crores)					
at current prices	14,003	36,730	38,899	42,136	52,193
at 1960-61 prices	14,003	20,365	20,672	20,574	21,214
Index number of gross national product					
at current prices	100.0	262.3	277.8	300.9	372.7
at 1960-61 prices	100.0	145.4	147.6	146.9	151.5

[1]Provisional. [2]Quick estimates.

Table 11.2 gives the national product and some related aggregates at current prices for selected years since 1960-61.

Table 11.3 gives the share of public and private sectors in domestic product at current prices.

Table 11.4 gives the private consumption expenditure, net domestic savings and capital formation since 1960-61.

EMPLOYMENT AND UNEMPLOYMENT

For 1971 census, the population was divided into workers and non-workers. There were nine categories of workers, *viz.*, (i) cultivators, (ii) agricultural labourers, (iii) livestock, forestry, fishing, etc., (iv)

TABLE 11.2 NATIONAL INCOME AND SOME RELATED AGGREGATES

(*Rs crores*)

Item	1960-61	1969-70	1970-71[1]	1971-72[1]
(a) Gross national product at factor cost	14,003	33,883	36,730	38,899
(b) *Add* indirect taxes *less* subsidies	947	3,059	3,523	4,072
(c) Gross national product at market prices (a+b)	14,950	36,942	40,253	42,971
(d) *Less* consumption of fixed capital	736	1,915	2,103	2,300
(e) Net national product at market prices (c–d)	14,214	35,027	38,150	40,671
(f) *Less* net factor income from abroad	(—)68	(—)272	(—)282	(—)280
(g) Net domestic product at market prices (e–f)	14,282	35,299	38,432	40,951
(h) Net domestic product at factor cost	13,335	32,240	34,909	36,879
(i) *Less* income from domestic product accruing to public authorities[2]	187	584	592	667
(j) *Less* savings of government companies and statutory corporations	11	19	83	64
(k) Income from domestic product accruing to private sector (h–i–j)	13,137	31,637	34,234	36,148
(l) *Add* national debt interest	59	252	244	296
(m) *Add* net factor income from abroad	(—)68	(—)272	(—)282	(—)280
(n) *Add* transfer payments	166	492	577	727
(o) *Add* other current transfers from the rest of the world (net)	28	125	123	163
(p) Private income (k+l+m+n+o)	13,322	32,234	34,896	37,054
(q) *Less* saving of private corporate sector	114	147	216	232
(r) *Less* corporation tax	111	353	370	472
(s) Personal income (p–q–r)	13,097	31,734	34,310	36,350
(t) *Less* direct taxes paid by household	309	690	721	803
(u) *Less* fees, fines[3], etc.	61	129	162	274
(v) Personal disposable income (s–t–u)	12,727	30,915	33,427	35,273

[1] Provisional.
[2] Government administration and departmental enterprises.
[3] Available data do not permit separation of fees, fines, etc., paid by producers and to that extent personal disposable income is under-estimated.

TABLE 11.3 SHARE OF PUBLIC AND PRIVATE SECTORS IN DOMESTIC PRODUCT (AT CURRENT PRICES)

(*Rs crores*)

Item	1960-61	1970-71[1]	1971-72[1]	1972-73[1]
Gross domestic product (total)	14,071 (100.0)	37,012 (100.0)	39,179 (100.0)	42,445 (100.0)
Gross product of public sector	1,538 (10.9)	5,467 (14.8)	6,144 (15.7)	6,867 (16.2)
Government administration	735 (5.2)	2,401 (6.5)	2,698 (6.9)	2,965 (7.0)
Departmental enterprises	586 (4.2)	1,466 (4.0)	1,596 (4.1)	1,686 (4.0)
Non-departmental enterprises	217 (1.5)	1,600 (4.3)	1,850 (4.7)	2,216 (5.2)
Gross product of private sector	12,533 (89.1)	31,545 (85.2)	33,035 (84.3)	35,576 (83.8)
Net domestic product (total)	13,335 (100.0)	34,909 (100.0)	36,879 (100.0)	39,899 (100.0)
Net product of public sector	1,422 (10.6)	5,047 (14.5)	5,691 (15.4)	6,357 (15.9)
Government administration	735 (5.5)	2,401 (6.9)	2,698 (7.3)	2,965 (7.4)
Departmental enterprises	522 (3.9)	1,361 (3.9)	1,493 (4.0)	1,560 (3.9)
Non-departmental enterprises	165 (1.2)	1,285 (3.7)	1,500 (4.1)	1,832 (4.6)
Net product of private sector	11,913 (89.4)	29,862 (85.5)	31,188 (84.6)	33,542 (84.1)

[1] Provisional.
Note: Figures in brackets indicate percentage share.

TABLE 11.4
PRIVATE CONSUMPTION, SAVINGS AND CAPITAL FORMATION

Year	Private final consumption expenditure (Rs crores) at current prices	Private final consumption expenditure (Rs crores) at 1960-61 prices	Per capita private final consumption expenditure (Rs) at current prices	Per capita private final consumption expenditure (Rs) at 1960-61 prices	Net domestic savings (Rs crores) at current prices	Rate of savings (per cent)	Net domestic capital formation (Rs crores) at current prices	Net domestic capital formation (Rs crores) at 1960-61 prices	Rate of capital formation at current prices (per cent)
1960-61	12,210	12,210	281.3	281.3	1,324	9.3	1,805	1,805	12.6
1968-69	26,156	14,927	504.9	288.2	3,303	10.4	3,720	2,374	11.7
1969-70	28,650	15,631	541.6	295.5	4,048	11.5	4,290	2,646	12.2
1970-71[1]	30,629	16,039	566.2	296.5	4,784	12.4	5,175	2,979	13.5
1971-72[1]	N.A.	N.A.	N.A.	N.A.	4,246	10.4	4,729	2,582	11.5
1972-73[1]	N.A.	N.A.	N.A.	N.A.	5,140	11.6	5,441	2,788	12.2

[1] Provisional. N.A.—Not available.

mining and quarrying, (v) manufacturing, processing, etc., (vi) construction, (vii) trade and commerce, (viii) transport, storage and communications, and (ix) other services. Non-workers were divided into the following seven categories: (i) those engaged in household duties, (ii) students, (iii) retired persons or rentiers, (iv) dependants, (v) beggars, (vi) those living in institutions, and (vii) other non-workers. Table 11.5 shows the number of workers and non-workers in rural and urban areas.

TABLE 11.5
POPULATION, WORKERS BY CATEGORIES AND NON-WORKERS

(in crores)

	Rural	Urban	Total
Total population	43.88	10.91	54.79
Workers	14.84	3.20	18.04
(i) cultivators	7.65	0.16	7.81
(ii) agricultural labourers ..	4.56	0.19	4.75
(iii) livestock, forestry, fishing, etc. ..	0.38	0.06	0.44
(iv) mining and quarrying ..	0.06	0.03	0.09
(v) manufacturing, processing, etc. ..	0.82	0.89	1.71
(vi) construction	0.11	0.11	0.22
(vii) trade and commerce	0.36	0.64	1.00
(viii) transport, storage and communications	0.12	0.32	0.44
(ix) other services	0.78	0.80	1.58
Non-workers	29.04	7.71	36.75

Employment in Organised Sector

The employment position in the entire country is not available for the inter-censual period. However, the data collected under Employment Market Information give an idea of employment in the organised sector covering the entire public sector and those establishments in the non-agricultural private sector employing 10 or more persons.

Employment in the organised sector at the beginning and the end of the Fourth Plan, *i.e.*, on 31 March 1969, and on 31 March 1974 has been shown in Table 11.6.

The Table also shows that during the Fourth Plan period 26.49 lakh more persons got employment—24.55 lakhs in the public sector and 1.94 lakhs in the private sector.

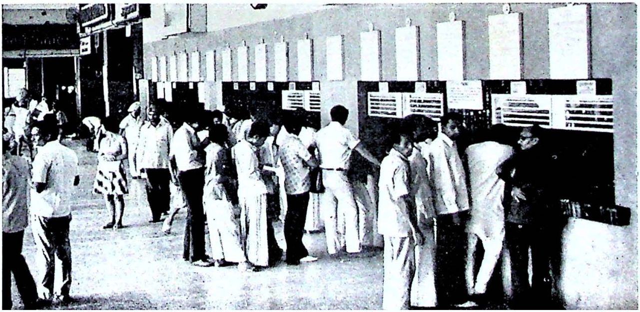
Unemployment

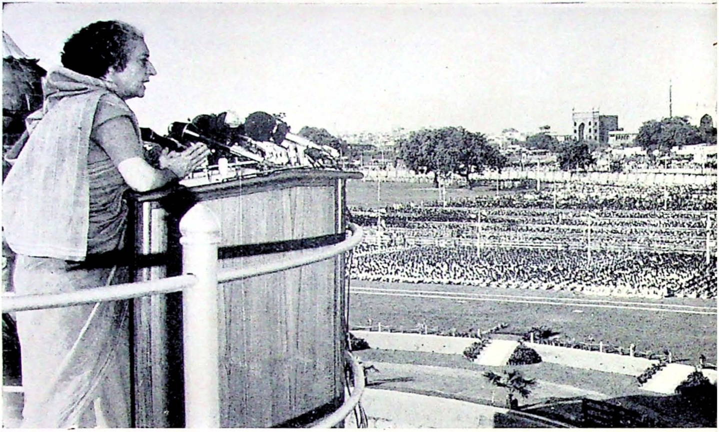
A comparable series on the level of unemployment in the country is not yet available. However, the number of persons on the live register of employment exchanges gives an idea of the trend of unemployment subject to certain limitations. Employment exchanges cover mainly urban areas. Registration with the employment exchanges being voluntary, not all the unemployed register themselves with the exchanges. Further, some of the registrants are already

ERA OF DISCIPLINE
AND
ECONOMIC REGENERATION

All quiet in the Campus

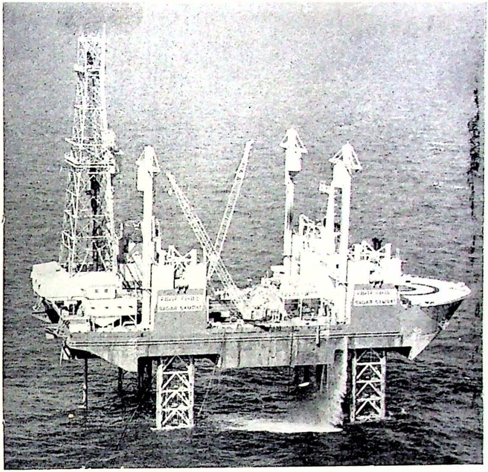
Orderly queues at bus stops and railway ticket counters



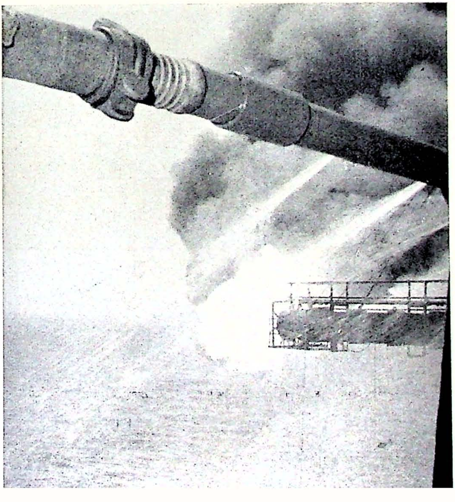


The Prime Minister addressing the Independence Day rally from the ramparts of Red Fort in Delhi

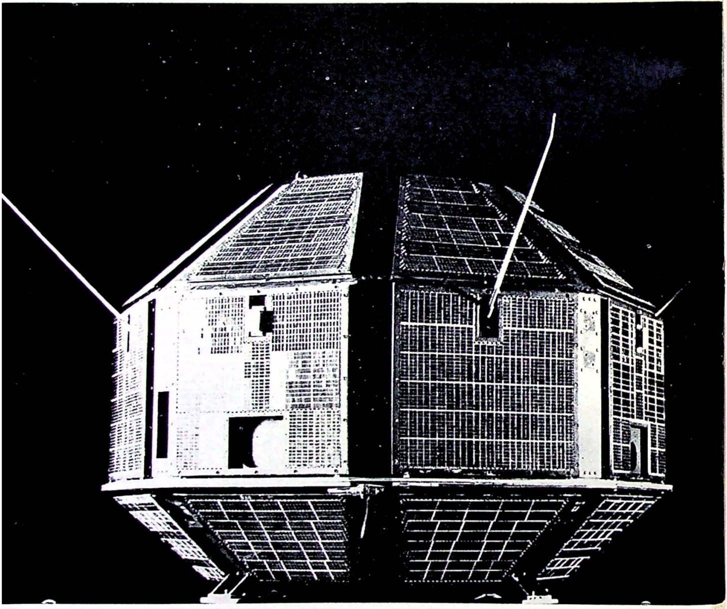
Shrimati Indira Gandhi meeting women who called on her to pledge their support to the New Economic Programme



Exploration for oil in Bombay High. Sagar Samrat jacked up for drilling operations

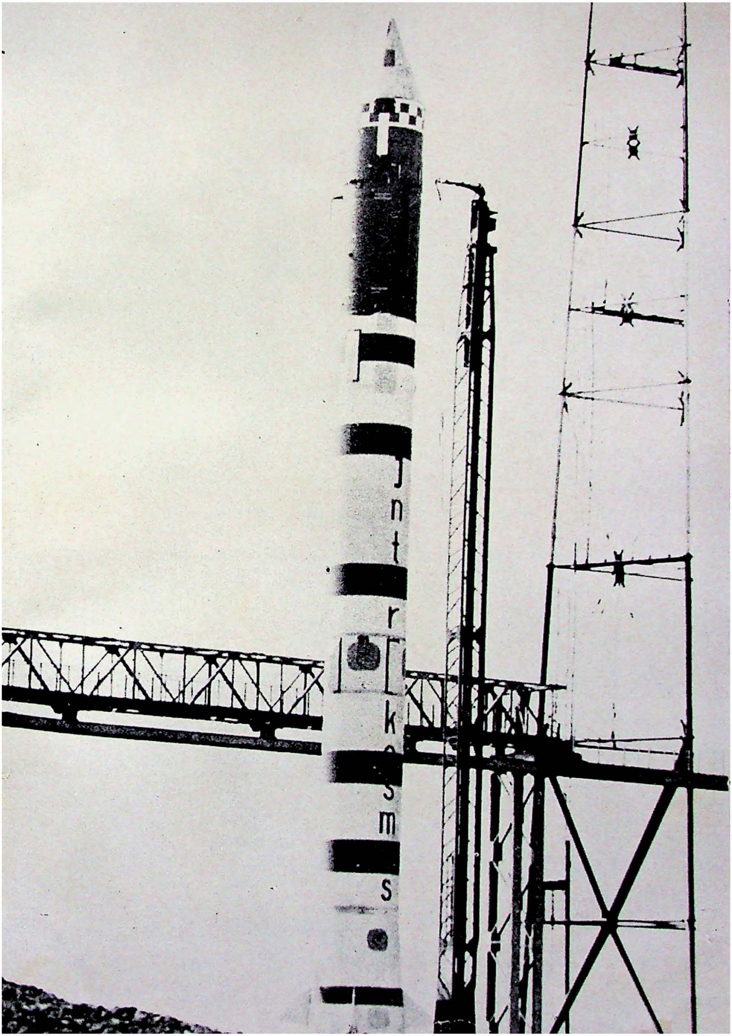


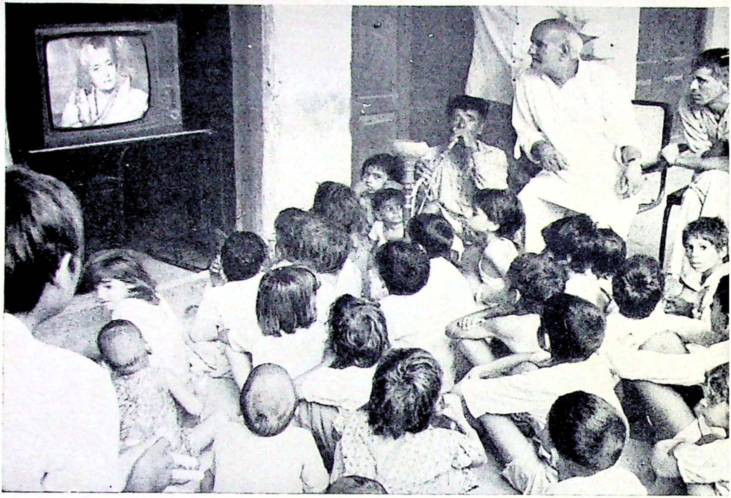
The effort bears fruit



Aryabhata, *the first Indian satellite, launched in April*

Cosmos vehicle on the launching pad with Aryabhata *atop*



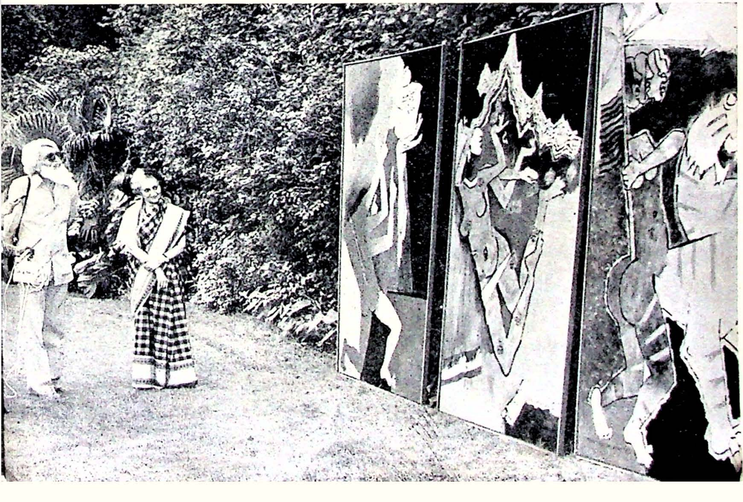


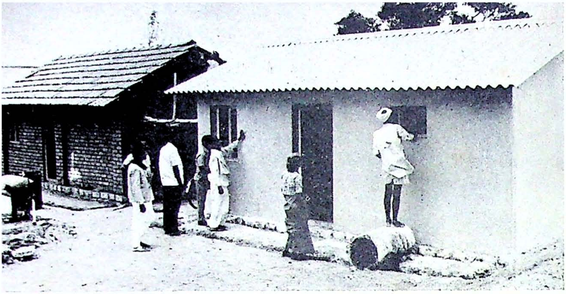
Villagers viewing the inaugural SITE programme on TV

India won the World Cup Hockey at Kuala Lumpur in March

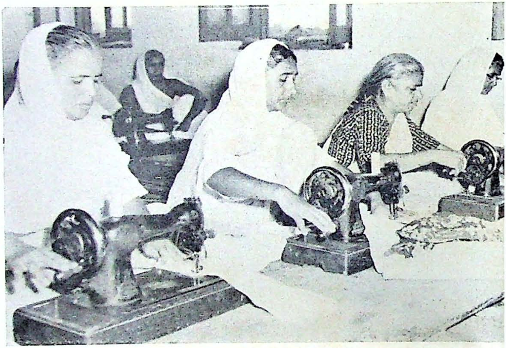
The Prime Minister Speaks to the People. Television and Radio broadcast over the national network in November

The three paintings of M.F. Husain on Emergency. The Prime Minister and Shri Husain looking at the paintings

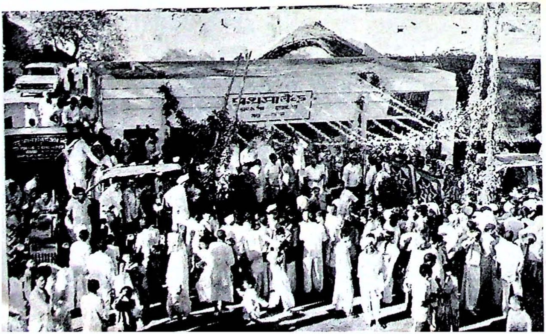




Welfare of weaker sections has priority in the 20-Point Economic Programme: low cost houses for people of the backward classes



Classes in tailoring for women belonging to weaker sections



Extension of banking facilities to rural areas—the Prathama Bank inaugurated in Moradabad in Uttar Pradesh on Gandhi Jayanti

TABLE 11.6
EMPLOYMENT IN ORGANISED SECTOR

(*in lakhs*)

	March 1969	March 1974
Public sector		
Central government	27.20	29.39
State government	39.00	47.06
Quasi-government	15.80	29.12
Local bodies	18.30	19.28
TOTAL	100.30	124.85
Private sector (non-agricultural)		
Larger establishments (employing 25 or more workers)	58.70	60.71
Smaller establishments (employing 10-24 workers)	7.30	7.23
TOTAL ..	66.00	67.94
GRAND TOTAL	166.30	192.79

employed but have registered for seeking better employment. The number of job seekers on the live registers of employment exchanges has increased from 34.23 lakhs as on 31 December 1969 to 84.33 lakhs as on 31 December 1974. Table 11.7 gives the occupational distribution of registrants with the employment exchanges as on 31 December 1974. Nearly three-fourths of the persons on the live register were workers not classified by occupations.

TABLE 11.7
APPLICANTS ON THE LIVE REGISTER OF EMPLOYMENT EXCHANGES

Occupational group	Number as on 31-12-74 ('000)	Percentage to total
Professional, technical and related workers	442.5	5.2
Administrative, executive and managerial workers	8.8	0.1
Clerical and related workers	468.1	5.5
Sales workers	2.1	—
Farmers, fishermen, hunters, loggers and related workers	227.1	2.7
Service workers	25.7	0.3
Production and related workers, transport equipment operators and labourers	915.2	10.9
Workers not classified by occupations		
(a) Below Matric (including illiterates and others)	2,998.4	35.6
(b) Matric and above but below graduates	2,716.2	32.2
(c) Graduates and above	628.8	7.5
TOTAL	8,432.9	100.0

Notes: The revised National Classification of Occupations (NCO 1968) was introduced with effect from June 1974.

NATIONAL SAMPLE SURVEY ORGANISATION

The National Sample Survey (NSS) was set up in 1950 with the aim of obtaining comprehensive and continuing information relating to social, economic, demographic, industrial and agricultural statistics through sample surveys on a countrywide basis. In 1970, a National Sample Survey Organisation (NSSO) was created and the National Sample Survey was made a part of the new organisation. The NSSO has four divisions, namely, (i) Survey, Design and Research, (ii) Field Operations, (iii) Data Processing, and (iv) Economic Analysis to conduct its sampling enquiries. To reduce the time lag between the collection of data and its processing, manual tabulation centres were set up in 1972-73 in different parts of the country for tabulating the data on a few selected key items.

The activities of the NSSO cover the fields of socio-economic, industrial and agricultural statistics. The socio-economic surveys are

carried out annually on different subjects in collaboration with the State Statistical Bureaus (SSBs). Of the total all-India sample of villages and urban blocks, one half of the sample is canvassed by NSSO staff and the other half by the SSBs. Industrial statistics are obtained through Annual Survey of Industries conducted under the Collection of Statistics Act, 1953. The field work of the survey is carried out by the Field Operation Division and processing of the data is done in the Central Statistical Organisation. In the field of agricultural statistics, the NSSO provides technical guidance to the states for the conduct of crop estimation surveys.

The programme of data collection is done by rounds of surveys. Principal subjects covered during the 29th Round (1974-75) were: (i) self-employment in non-agricultural enterprises, and (ii) rural labour enquiry. The 30th Round began on 1 July 1975. It is devoted to livestock numbers, livestock products and livestock enterprises. A scheme for intensive sample checks on the enumeration of crop area and crop-cutting experiments carried out by the state agencies has been launched in Kharif and Rabi (1974-75) in collaboration with the State Agricultural Statistics Authorities. The Annual Survey of Industries (ASI) 1973-74 has been completed. The ASI 1974-75 started from 1 June 1975.

PRICES

The wholesale prices which were rising continuously during the last few years have shown a downward trend as a result of the various measures taken since July 1974 and particularly after the declaration of the Emergency. The wholesale prices went down by 6.5 per cent in the last week of November 1975 as compared to the corresponding period during last year. The movement of wholesale prices in India during recent years is shown in Table 11.8.

TABLE 11.8
INDEX NUMBERS OF WHOLESALE PRICES

(Base: 1961-62=100)

Item	Weight	1971-72	1972-73	1973-74	1974-75	As on 30 Nov. 1974	As on 29 Nov. 1975
Food articles							
Total	(41.3)	210.3	239.5	295.6	363.6	372.0	338.6
Foodgrains	14.8	214.9	247.5	296.0	400.7	412.4	336.2
Liquor and tobacco	(2.5)	194.8	233.0	251.2	305.4	317.4	322.0
Fuel, power, light and lubricants	(6.1)	172.1	180.7	215.1	315.8	320.0	351.7
Industrial raw materials							
Total	(12.1)	191.0	204.0	299.2	327.2	322.1	258.9
Fibres	4.1	183.7	168.3	224.6	267.8	236.3	224.1
Oilseeds	5.2	208.6	237.3	378.9	407.3	421.1	288.3
Minerals	0.4	138.8	140.1	149.9	164.6	198.5	160.4
Others	2.4	172.6	200.7	274.9	277.8	271.2	269.1
Chemicals	(0.7)	197.0	200.8	219.8	300.1	309.4	323.3
Machinery and transport equipment	(7.9)	159.0	168.2	183.4	254.4	253.1	263.3
Manufactures							
Total	(29.4)	167.1	176.7	205.6	254.5	256.5	252.8
Intermediate products	5.7	196.7	212.3	268.0	320.1	305.9	305.7
Finished products	23.7	154.9	168.0	190.4	238.6	244.5	240.0
All commodities	(100.0)	188.4	207.1	254.3	313.7	317.6	298.1

Consumer Prices

The all-India working class consumer price index on base 1949=100 has been replaced by a new series of consumer price index numbers for industrial workers on base 1960=100 with effect from August

1968. Table 11.9 shows the consumer price index numbers for industrial workers for the period 1968-69 to 1974-75. Whereas the 1949 series were based on the indices for 27 different centres, the new series are based on indices for 50 centres of industrial activity including some in the plantation and mining sectors. Figures from the new series (for the earlier years) have been obtained from 1949 series by using the linking factor of 1.2154 for the general index. This linking factor has been derived by dividing the average working class consumer price index (1949=100) for the period August 1967-July 1968 by the corresponding average index for the new series.

TABLE 11.9
CONSUMER PRICE INDEX NUMBERS FOR INDUSTRIAL WORKERS

(Base: 1960=100)

Year	Bombay	Ahmada-bad	Cal-cutta	Madras[1]	Kanpur	Delhi	All-India	
							All items	Food
1968-69	167	165	170	150	174	178	174	192
1969-70	175	169	172	160	182	185	177	193
1970-71	182	176	182	170	190	199	186	201
1971-72	190	181	187	182	196	211	192	205
1972-73	203	198	197	203	212	222	207	223
1973-74	233	245	228	229	251	265	250	279
1974-75	289	305	288	301	323	337	317	358[2]

[1] Figures for the period up to January 1970 have been estimated from the old Consumer Price Index series for Madras city on base July 1935-June 1936=100. From February 1970 onwards, figures are from the Labour Bureau's New Series on base 1960=100.

[2] Average of 11 months (April 1974 to February 1975).

Note: All-India index figures for the period prior to August 1968 have been obtained from 1949 series by using the following conversion factors:
General Index (conversion factor)—1.2154.
Food Index (conversion factor)—1.1574.

During 1974-75, the all-India general index showed a rise of 67 points from that of the previous year and the all-India food index alone rose by 79 points.

Table 11.10 gives the index numbers of consumer prices for urban non-manual employees for the period 1967-68 to 1973-74. The index numbers for some recent months are also given.

TABLE 11.10
CONSUMER PRICE INDEX NUMBERS FOR URBAN NON-MANUAL EMPLOYEES

(Base: 1960=100)

Year/Month	Bombay	Calcutta	Madras	Delhi/ New Delhi	All-India
1967-68	153	152	154	154	159
1968-69	156	156	154	162	161
1969-70	162	162	161	168	167
1970-71	168	170	175	174	174
1971-72	172	174	188	180	180
1972-73	183	180	204	190	192
1973-74	204	204	231	217	221
April 1974	222	221	257	238	244
May 1974	231	227	264	248	251
June 1974	236	229	269	253	256
July 1974	240	233	273	254	262
August 1974	244	240	285	263	270
September 1974	246	246	296	269	279
October 1974	249	246	304	271	282
November 1974	250	246	308	269	283
December 1974	248	244	313	268	282
January 1975	246	239	311	269	280
February 1975	241	238	306	268	278

12 FINANCE

PUBLIC FINANCE

The power to raise and disburse public funds has been divided under the Constitution between the Government of India and state governments. There are thus more than one budget and more than one public treasury in the country. The sources of revenue for the union and the states are, by and large, mutually exclusive, if shareable taxes between them are excluded.

The Constitution provides that (i) no tax can be levied or collected except by authority of law, (ii) no expenditure can be incurred from public funds except in the manner provided in the Constitution, and (iii) the executive authorities must spend public money only in the manner sanctioned by Parliament in the case of the union and by the state legislature in the case of a state.

All receipts and disbursements of the union government are kept under two separate headings, namely, the Consolidated Fund of India and the Public Account of India. All revenues received, loans raised and moneys received in repayment of loans by the union government go to form the Consolidated Fund. No money can be withdrawn from this Fund except under the authority of an Act of Parliament. All other receipts and disbursements, such as, deposits, service funds and remittances go into the Public Account which is not subject to the vote of Parliament. To meet unforeseen needs, not provided in the Annual Appropriation Act, a Contingency Fund of India has also been established under article 267(i) of the Constitution.

The Constitution also provides for the establishment of a Consolidated Fund, a Public Account and a Contingency Fund for each state.

The Railways, the largest public undertaking, have their own funds and accounts and their budget is presented separately to Parliament. The appropriations and disbursements under the railway budget are subject to the same form of parliamentary and audit control as other appropriations and disbursements.

Sources of Revenue

The main sources of union revenues are customs duties, union excise duties and the corporation and income taxes (excluding taxes on agricultural income). The revenue from the wealth tax accrues to the union. Since 1971-72, the value of agricultural property held by individuals and Hindu undivided families has also been brought under the purview of the Wealth Tax Act. However, the net proceeds of the wealth tax on agricultural property are passed on to the states. The Railways and Posts and Telegraphs also contribute to the general revenues of the union out of their net profits.

The main heads of revenue in the states are the taxes and duties levied by state governments, the share of taxes levied by the central government and grants received from the union. Land revenue, sales tax, state excise duties, registration and stamp duties and shares of income tax and union excise duties constitute more than four-fifths of the tax revenue and more than half of the total revenue receipts of the states. Property taxes and octroi and terminal taxes are the mainstay of local finance.

Transfer of Resources to States

The devolution of resources from the union to the states is a salient feature of the system of federal finance in India. Apart from their share of taxes and duties, state governments receive statutory and other grants as well as loans for various development schemes and rehabilitation purposes. The total amount of resources transferred to the states during the Second Plan period was more than double of that during the First Plan period. It was nearly double again during the Third Plan. In later years, except 1967-68 and 1968-69, it has been on the increase as shown in Table 12.1. The decline in the total resources transferred to states during 1973-74 and 1974-75 was mainly due to rescheduling of debt repayments as suggested by the Sixth Finance Commission.

TABLE 12.1 RESOURCES TRANSFERRED TO STATES

(*Rs crores*)

Period	Taxes and duties	Grants	Loans[1]	Total	Aggregate expenditures of state govts.	(4) as percentage of (5)
	1	2	3	4	5	6
First Plan	352.5	214.8	637.9	1,205.2	3,351.9	36.0
Second Plan	710.1	700.4	1,037.9	2,440.4	5,845.9	41.7
Third Plan	1,196.0	1,302.9	2,151.2	4,650.1	10,719.5	43.4
1966-67	372.6	413.1	638.5	1,424.2	3,063.9	46.5
1967-68	415.7	479.0	492.5	1,387.2	3,221.0	43.1
1968-69	491.0	507.2	321.8	1,320.0	3,627.3	36.4
1969-70	621.3	531.2	398.2	1,550.7	4,039.1	38.4
1970-71	755.3	576.0	350.5	1,681.8	4,469.1	37.6
1971-72	941.9	875.9	366.2	2,184.0	5,305.7	41.2
1972-73	1,066.6	926.4	851.2	2,844.2	6,475.8	43.9
1973-74 (RE)	1,173.6	965.7	678.0	2,817.3	7,298.9	38.6
Fourth Plan period	4,558.7	3,875.2	2,644.1	11,078.0	27,588.6	40.2
1974-75 (BE)	1,172.3	1,011.4	505.0	2,688.7	7,426.1	36.2

[1] Net of repayments. RE—Revised estimates. BE—Budget estimates.

Finance Commission

Under the Constitution, a Finance Commission is to be constituted every fifth year or at such earlier time as the President considers necessary to make recommendations to the President as to (i) the distribution between the union and the states of the net proceeds of taxes which are to be, or may be divided between them under the Constitution and the allocation between the states of the respective shares of such proceeds; (ii) the principles which should govern the grants-in-aid of the revenues of the states in need of such assistance out of the Consolidated Fund of India; and (iii) any other matter referred to the Commission by the President in the interests of sound finance. The recommendations of the Commission together with any explanatory memorandum as to the action taken thereon are laid before each house of Parliament.

The Sixth Finance Commission was appointed in June 1972. The Commission was asked to go into the question of the non-plan capital gap of the states and also to review their debt position. The Commission presented its report on 28 October 1973. All the recommendations of the Commission have been accepted by the Government. According to the Commission's recommendations the share of the states in income tax pool has been raised from 75 per cent to 80 per cent. The Commission has not suggested any change in regard to sharing of basic union excise duties and the states' share would,

therefore, continue to be 20 per cent of the total net proceeds. It has, however, recommended that the auxiliary duties of excise should also be shared from 1976-77 onwards. The grants-in-aid to states are to rise from Rs 711 crores during the five years ended 1973-74 to Rs 2,510 crores during the period 1974-79.

The Commission has recommended liberalisation of the terms of repayment of most categories of central loans outstanding at the end of 1973-74 and this would provide the states with a debt relief of about Rs 1,970 crores over the period of five years ending 1978-79. The Commission has not favoured the setting up of a national fund for incurring relief expenditure.

It is estimated that during the Fifth Plan period the transfer of resources to states by way of their share in central taxes and duties and grants under article 275 of the Constitution would amount to Rs 9,609 crores as against Rs 5,316 crores during the Fourth Plan period.

Budgetary Position

Table 12.2 shows the budgetary position of the Government of India and Table 12.3 gives the consolidated budgetary position of the states and union territories for selected years.

Annual Financial Statement or Budget

An estimate of all anticipated revenue and expenditure of the union government for the ensuing financial year is laid before Parliament on the last working day of February every year. This is known as the 'Annual Financial Statement' or the 'Budget' and covers the central government's transactions of all kinds in and outside India occurring during the year in which the statement is prepared as well as the ensuing year or the Budget year as it is known.

The presentation of the Annual Financial Statement is followed by a general discussion in both the Houses of Parliament. The estimates of expenditure are then placed before the Lok Sabha in the form of 'Demands for Grants'. Ordinarily, a separate 'Demand' is made for each Ministry. All withdrawals of money from the Consolidated Fund are thus authorised by an Appropriation Act passed by Parliament every year. The tax proposals of the Budget are embodied in another bill which is passed as the 'Finance Act' of the year.

Estimates of receipts and expenditure are similarly presented by state governments to their legislatures before the beginning of the financial year and legislative sanction for expenditure is secured through similar procedure.

Audit

The Constitution requires that the audit authorities, who are independent of the executive, should scrutinise the expenditure of the central and state governments and ensure that this is strictly within the limits of their competence. It further enjoins that an account of the expenditure of each government should be approved by its legislature.

Budget Estimates 1975-76

The budget estimates for 1975-76, as presented to Parliament on 28 February 1975 placed expenditure on revenue account at Rs 7,265 crores, including states' share of union excise duties, as compared to Rs 6,563 crores (revised) in 1974-75 and revenue at Rs 7,866 crores (including the union's share of the proposed additional taxation amounting to Rs 217 crores) as compared to Rs 7,182 crores (revised) in the previous year, resulting in anticipated surplus of Rs 601 crores. However, taking into account the capital transactions, this surplus has been

TABLE 12.2

BUDGETARY POSITION OF THE GOVERNMENT OF INDIA[1]

(*Rs crores*)

	1965-66	1970-71	1971-72	1972-73	1973-74 (Revised)	1974-75 (Budget)[2]
I. *Revenue account*						
A. Revenue	2,344.4	3,341.9	4,027.9	4,578.3	5,102.9	5,454.8 (5,640.0)
B. Expenditure	2,024.6	3,178.9	4,127.9	4,592.6	4,954.7	5,407.9
C. Surplus (+) or deficit (—)	+319.8	+163.0	—100.0	— 14.3	+148.2	+ 46.9 (+232.1)
II. *Capital account*						
A. Receipts [3,4]	1,646.3	2,524.2	3,030.9	2,974.0	3,481.6[7]	3,597.9
B. Disbursements	2,138.9	2,972.0	3,450.2	3,828.6[6]	4,279.9[7]	3,955.9
C. Surplus (+) or deficit (—)	—492.6	—447.8	—419.3	—854.6[6]	—798.3	—358.0
III. Overall Surplus (+) or deficit (—) (I C+II C)	—172.8	—284.8	—519.3	—868.9[6]	—650.1	—311.1 (—125.9)
Financed by:						
A. Increase in (—) treasury bill[5]	—218.3	—359.1	—349.6	—954.9[6]	—554.2	—125.8
B. Cash balances decrease (—) or increase (+)	+ 45.5	+ 74.3	—169.7	+ 86.0	— 95.9	— 0.1
(i) opening balance	— 2.0	+156.0	+230.1	+ 60.4	+146.4	+ 50.5
(ii) closing balance	+ 43.5	+230.3	+ 60.4	+146.4	+ 50.5	+ 50.4

[1]From 1965-66 onwards changes have been effected in accounting classification of the budget. For budgetary position of earlier years see 'India 1975'. [2]At 1973-74 rates of taxation. The effects of additional taxation adjusted for tax concessions are given in brackets. Details of financing are in respect of overall deficit after taking credit for yield from additional taxation. [3]Excluding Treasury Bill receipts. [4]Excludes conversion of ad-hoc Treasury bills of Rs 50 crores in 1965-66, Rs 75 crores in 1970-71 and Rs 100 crores each in 1971-72, 1972-73 and 1973-74 (revised estimates) to dated securities. [5]Mostly sold to the Reserve Bank. [6]Excludes the notional transfer of Rs 421.1 crores on account of centre's assistance to states for clearing their overdrafts with the RBI. [7]Excluding PL-480 transactions under Indo-US Agreement, 1974.
Source: Reserve Bank of India Bulletin, May 1974.

TABLE 12.3

CONSOLIDATED BUDGETARY POSITION OF STATES AND UNION TERRITORIES

(*Rs crores*)

Major head	1950-51	1960-61	1965-66	1972-73	1973-74 (Revised)	1974-75 (Budget)
I. *Revenue account*						
Revenue	375.8	1,041.4	1,867.1	4,591.2	5,129.3	5,623.2
Expenditure	373.8	1,016.2	1,901.2	4,660.8	5,355.2	5,437.7
Surplus (+) or deficit (—)	+ 2.0	+ 25.2	— 34.1	— 69.6	— 225.9	+ 185.5
II. *Capital account*						
Receipts	112.6	427.8	928.6	1,376.0[1]	1,447.4	1,139.5
Disbursements	99.2	452.0	982.5	1,327.4	1,361.8	1,340.2
Surplus (+) or deficit (—)	+ 13.4	— 24.2	— 53.9	+ 48.6	+ 85.6	— 200.7
III. *Overall surplus (+) or deficit (—)* ..	+ 15.4	+ 1.0	— 88.0	— 21.0	— 140.3	— 15.2
Financed by :						
A. Ways and means advances from Reserve Bank of India (net) ..	— 4.6	+ 3.2	+ 14.0	+ 4.0	+ 32.3	— 35.9
B. Drawals from cash balances	— 10.8	— 4.2	+ 74.0	+ 17.0	+ 108.0	+ 51.1

[1]Excludes Rs 421.1 crores of loan assistance received from the central government for clearing the overdrafts with the Reserve Bank of India.

turned into a deficit of Rs 247 crores (after allowing for the post-budget concessions).

Income Tax

Under the 20-Point Economic Programme income tax exemption limit has been raised from Rs 6,000 to Rs 8,000 to provide relief to middle class.

Table 12.4 gives the comparative incidence of income tax at selected levels of income of individuals at 1975-76 tax rates.

TABLE 12.4
INCIDENCE OF INCOME TAX AT SELECTED LEVELS

Income (Rs)	Tax (including surcharge) (Rs)	Effective rate (%)
8,000	Nil	Nil
9,000	187	2.08
10,000	374	3.74
11,000	561	5.10
12,000	748	6.23
13,000	935	7.19
14,000	1,122	8.01
15,000	1,309	8.73
20,000	2,453	12.26
25,000	4,103	16.41
40,000	11,803	29.51
50,000	17,303	34.61
60,000	23,903	39.84
70,000	30,503	43.58
80.000	38,203	47.75
90,000	45,903	51.00
1,00,000	53,603	53.60
1,50,000	92,103	61.40
2,00,000	1,30,603	65.30
2,50,000	1,69,103	67.64
3,00,000	2,07,603	69.20
5,00,000	3,61,603	72.32
10,00,000	7,46,603	74.66

With a view to directly checking the expansion of demand by curtailing disposable income in the hands of certain classes of people, three ordinances (since replaced by Acts of Parliament) were issued in early July, 1974. These were:

1. The Additional Emoluments (Compulsory Deposit) Act, 1974 provided for compulsory deposit of whole of additional wages and salaries for one year and a half of additional dearness allowance for two years. This covered nearly 1.8 crore employees in the government, public and private industrial sector.
2. The Companies (Temporary Restrictions on Dividends) Act, 1974 provided for limiting the after-tax profits distributed by companies to $33\frac{1}{3}$ per cent of such profits, or to 12 per cent of the face value of the equity shares of the company and the dividend payable on its preference shares, whichever is less. Following the curb on dividend distribution, it was also found necessary to impose certain restrictions on the frequency of issues of bonus shares. Accordingly, the time lag between two successive announcements of bonus shares by a company was increased from 18 months to 40 months.
3. The Compulsory Deposit Scheme (Income Tax Payers) Act 1974 covered all income tax payers whose aggregate net annual income exceeded Rs 15,000. The rate of compul-

sory deposit prescribed was 4 per cent of the aggregate net annual income up to Rs 25,000; Rs 1,000 plus 6 per cent of the excess over Rs. 25,000 in the slab of Rs 25,001—Rs 70,000; and Rs 3,700 plus 8 per cent of the excess over Rs 70,000 in cases where income exceeds Rs 70,000.

Direct Taxation

The number of persons paying income tax, wealth tax and gift tax as on 31 March 1975 was 36,48,941, 2,18,928 and 87,954 respectively. Net collections from income tax in 1974-75 amounted to Rs 1,520.37 crores; from wealth tax Rs 39.74 crores; from gift tax Rs 5.05 crores and estate duties Rs 10.15 crores.

Direct Taxes Enquiry Committee

The Direct Taxes Enquiry Committee headed by Justice K.N. Wanchoo, a former Chief Justice of India, made a large number of legislative and administrative recommendations in its final report (December 1971) to tackle the problem of black money and tax evasion. The Taxation Laws (Amendment) Bill, 1973 was introduced in Parliament in May 1973 to give effect to several recommendations contained in the report as well as in the 47th report of the Law Commission on Trial and Punishment of Social and Economic Offences. The Bill sought to amend the Income tax Act, 1961, the Wealth Tax Act, 1957, the Gift Tax Act, 1958 and the Companies (Profits) Sur-tax Act, 1964. The main objectives of the Bill were to unearth black money and prevent its proliferation, to curb tax evasion and avoidance, to reduce tax arrears, to rationalise tax exemptions and deductions and to streamline the tax administration. The Bill has since become an Act in 1975.

Voluntary Disclosure of Unaccounted Income and Wealth

A scheme for voluntary disclosure of unaccounted income and wealth was announced through a Presidential ordinance on 8 October 1975. Its objective was to give tax evaders an opportunity to declare their undisclosed income and wealth by 31 December 1975, pay tax thereon on a reasonable basis without any penalty and channelise black money into productive fields in the overall interest of the economy.

Under the scheme, the declarants were also required to invest five per cent of their voluntarily disclosed income and 2.5 per cent of their disclosed wealth in notified government securities, the proceeds of which were to be utilised for projects of high social priority such as slum clearance and housing for low income groups.

A sum of over Rs 1,578 crores in concealed income and wealth had been disclosed under the scheme as on 27 January 1976.

Committee on Taxation of Agricultural Income and Wealth

The Committee on Taxation of Agricultural Income and Wealth submitted its report in October 1972. With a view to reducing income disparities, the Committee suggested, among other things, aggregation of both the agricultural and non-agricultural components of a tax-payer's income for purposes of determining the rates of income tax applicable to the non-agricultural portion in cases where the tax-payer has non-agricultural income exceeding the exemption limit of Rs 5,000. This recommendation has been implemented.

PUBLIC DEBT

The outstanding public debt of the Government of India was estimated at Rs 18,437.44 crores at the end of 1974-75 and is estimated to be Rs 19,829.56 crores at the end of 1975-76. Table 12.5 gives an analysis of the public debt outstanding at the end of selected years since 1950-51. Table 12.6 shows the debt position of state governments whose total liability aggregated to Rs 12,450 crores.

TABLE 12.5

PUBLIC DEBT OF THE GOVERNMENT OF INDIA

(*Rs crores*)

	As at the end of				
	1950-51	1960-61	1965-66	1974-75 (Revised)	1975-76 (Budget)
I. Debt raised in India					
(a) *Permanent debt*					
(i) Current loans	1,438.46	2,555.72	3,417.28	6,434.96	6,759.81
(ii) Compensation bonds	—	—	—	83.80	83.80
(iii) Prize bonds	—	15.63	11.35	1.04	0.94
(iv) 15-year annuity certificates	—	3.45	3.78	1.40	1.00
(v) Loans in course of repayment	6.49	22.73	33.72	54.19	54.19
TOTAL PERMANENT DEBT	1,444.95	2,597.53	3,466.13	6,575.39	6,899.74
(b) *Floating debt*					
(i) Treasury bills	358.02	1,106.29	1,611.82	4,709.43	5,165.51
(ii) Special floating loans	212.60	274.18	340.70	733.36	732.36
(iii) Treasury deposit receipts and other floating loans	6.73	—	—	—	—
TOTAL FLOATING DEBT	577.35	1,380.47	1,952.52	5,442.79	5,897.87
TOTAL DEBT RAISED IN INDIA	2,022.30	3,978.00	5,418.65	12,018.18	12,797.61
II. Debt raised outside India	32.03	760.96	2,590.62	6,419.26	7,031.95
TOTAL PUBLIC DEBT	2,054.33	4,738.96	8,009.27	18,437.44	19,829.56

TABLE 12.6

DEBT POSITION OF STATES

(*Rs crores*)

	As at the end of					
	1951-52	1965-66	1969-70	1972-73	1973-74 (Revised)	1974-75 (Budget)
I. *Public debt*						
(i) Permanent debt[1]	134	827	1,131	1,465	1,622	1,790
(ii) Floating debt[2]	16	189	182	94	128	73
(iii Loans from central government	241	4,110	5,987	8,017	8,688	9,211
(iv) Other debt[3]	—	162	229	273	326	413
II. *Unfunded debts*[4] ..	58	231	453	722	857	963
TOTAL:	449	5,519	7,982	10,571	11,621	12,450

[1]Represents current and expired loans floated in the market and zamindari/jagirdari abolition bonds.

[2]Represents mainly ways and means advances from the Reserve Bank of India.

[3]Includes loans from the National Agricultural Credit (Long-term operations) Fund of RBI, National Co-operative Development Corporation, Khadi and Village Industries Commission, Employees' State Insurance Corporation, Central Warehousing Corporation of India, State Bank of India, etc.

[4]Includes state provident funds, postal insurance and life annuity funds, family pension fund, staff benefit fund and special loans consisting generally of endowments for specific purposes of a religious and charitable nature.

MONEY SUPPLY AND CURRENCY

Money supply comprises currency with the public and such of the deposit money with the banking system, including the Reserve Bank of India, as is withdrawable 'On demand'. The total supply of money with the public thus stood at Rs 11,063.9 crores at the end of 1974 of which currency with the public accounted for Rs 6,137.4 crores and deposit money Rs 4,926.5 crores. In 1974, money supply registered an increase of Rs 878.8 crores as compared with a rise of Rs 1,469.2 crores in 1973. Component-wise, both currency with the public and deposit money recorded increases of Rs 336.4 crores and Rs 542.4 crores respectively during 1974 as compared with the rise of Rs 873.5 crores and Rs 595.7 crores respectively in 1973. The trends in money supply and its components since 1961 are indicated in Table 12.7.

TABLE 12.7
MONEY SUPPLY WITH PUBLIC

(*Rs crores*)

End of December	Currency with the public		Deposit money with the public		Money supply with the public	
	Amount	Annual variation	Amount	Annual variation	Amount	Annual variation
1961	2,059.5	+92.1	774.7	+36.9	2,834.2	+129.0
1962	2,246.3	+186.8	867.6	+92.9	3,113.9	+279.7
1963	2,475.8	+229.5	1,065.4	+197.8	3,541.2	+427.3
1964	2,661.1	+185.3	1,244.9	+179.5	3,906.0	+364.8
1965	2,865.0	+203.9	1,435.6	+190.7	4,300.6	+394.6
1966	3,008.1	+143.1	1,673.1	+237.5	4,681.2	+380.6
1967	3,209.8	+201.7	1,892.0	+218.9	5,101.8	+420.6
1968	3,372.2	+162.4	2,016.7	+124.7	5,389.0	+287.0
1969	3,763.6	+391.4	2,272.3	+255.6	6,036.0	+647.0
1970	4,170.0	+406.4	2,624.4	+352.1	6,794.4	+758.4
1971	4,577.0	+407.0	3,142.9	+518.5	7,719.9	+925.5
1972	4,927.5	+350.5	3,788.4	+645.5	8,715.9	+996.0
1973[1]	5,801.0	+873.5	4,384.1	+595.7	10,185.1	+1,469.2
1974[1]	6,137.4	+336.4	4,926.5	+542.4	11,063.9	+878.8

[1] Provisional.

The deceleration of the growth in money supply during 1974 was mainly due to the smaller increase in both bank credit to government and to commercial sector. Net bank credit to government increased by Rs 768 crores and bank credit to commercial sector by Rs 1,245 crores as compared to Rs 1,253 crores and Rs 1,872 crores respectively in 1973. A sharp decline in net foreign exchange assets of the banking sector by Rs 127 crores in contrast to a rise of Rs 24 crores and a smaller increase in government's net currency liabilities to public by Rs 18 crores as compared to Rs 48 crores in 1973 also contributed to the slower rate of expansion in money supply in 1974.

Currency

During 1974, currency in circulation[1] registered an expansion of Rs 345.29 crores (to Rs 6,428.6 crores) as compared with Rs 892.95 crores in the preceding year. Between 1961 and 1974 currency in circulation expanded by Rs 4,308.1 crores or by 203.3 per cent.

Of the expansion of Rs 345.29 crores in currency in circulation during 1974, bank notes accounted for an increase of Rs 327.42 crores, the expansion in 1973 under this head being Rs 844.85 crores. Rupee coins in circulation (inclusive of one rupee notes) were higher by Rs 10.19 crores as compared with an increase of Rs 28.87 crores in the

[1] Figures are inclusive of notes, rupee coins (including one rupee notes) and small coins held by banks and at treasuries but exclusive of Rs 43 crores of Indian notes received from Pakistan and awaiting cancellation.

preceding year. Circulation of small coins rose by Rs 7.68 crores which was slightly lower than that registered in 1973 at Rs 19.23 crores. At the end of 1974, bank notes, rupee coins (including one rupee notes) and small coins in circulation stood at Rs 5,923.44 crores, Rs 317.14 crores and Rs 187.98 crores respectively.

Fight Against Inflation

Like most of the countries of the world, India was in the grip of spiralling inflation for the past few years. The wholesale price index rose from 207.1 in 1972-73 to 254.3 in 1973-74 and to 313.7 in 1974-75. As a result of the anti-inflationary measures taken in the third quarter of 1974, prices showed a generally declining trend from October 1974. (see the special article 'Emergency and its Impact')

The impact of these measures, however, gathered momentum from July 1975 following the declaration of Emergency and the launching of the 20-Point Economic Programme. The measures included restraint on the growth of money supply, strict economy in government expenditure, streamlining production, procurement and distribution of essential commodities to weaker sections, unsparing action against smugglers, tax-evaders, blackmarketeers, hoarders and foreign exchange racketeers.

As a result of these measures wholesale prices in September 1975 were 7 per cent lower than they were in September 1974 when the rate of inflation had risen to 32 per cent—the highest ever. The significant feature of these measures is that prices which normally rise during the lean monsoon period showed a declining trend in 1975. Thus India has not only arrested inflation but has actually reversed it and achieved a minus rate of inflation.

ANTI-SMUGGLING MEASURES

The government has been taking various measures from time to time to deal effectively with the problem of smuggling and foreign exchange racketeering. The legislative measures include an amendment of the Customs Act in 1969 providing for control over internal transactions in certain categories of goods.

In 1973 the Customs Act was further amended to prescribe enhanced punishment. The Foreign Exchange Regulation Act 1947 was replaced by a new Act in 1973 to supplement anti-smuggling measures.

It was, however, observed that despite the amendments in the Customs Act and Foreign Exchange Regulation Act the king-pins in the smugglers' hierarchy always used to escape the dragnet of law and only their carriers or persons employed by them were caught. Hence preventive detention of persons engaged in such activities was resorted to for the first time by an ordinance amending the Maintenance of Internal Security Act of 1971. This ordinance was replaced by the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act (COFEPOSA) which came into force on 19 December 1974.

Measures following the Declaration of Emergency

To overcome the difficulties experienced in enforcing the Act and to further strengthen the anti-smuggling measures, the Act was amended following the declaration of Emergency. The amendment lays down that it is neither necessary to give the grounds of detention to a person who has been detained under the Act nor is it necessary to refer the case of a detenue to an advisory board during the period of Emergency. It also provides that a detention order cannot be invalidated merely because one or more of the grounds for detention are found invalid or inoperative. Following the declaration of Emergency, several alleged ring leaders of smuggling activities who had

earlier been released by orders of various high courts have been redetained. In addition further detention of many others was also ordered.

Steps have also been taken to pursue those who have not yet been apprehended, by declaring them as absconders under section 7(1)(b) of the COFEPOSA and moving for attachment of their property.

As a more stringent measure to effectively curb smuggling, a Presidential order issued on 5 November 1975 provides for forfeiture of illegally acquired properties of smugglers and foreign exchange manipulators and makes it unlawful for any person covered by the Ordinance to hold any illegally acquired property, whether movable or immovable, either by himself or through any other person on his behalf.

The Conservation of Foreign Exchange and Prevention of Smuggling Activities Act was further amended on 14 December 1975 by an ordinance giving the government the power to detain smugglers and foreign exchange racketeers for one or two years or as long as the Emergency lasts.

Through the amendment the government has assumed powers to extend the period of detention up to 31 December 1977 in those cases where the period of detention was due to expire by the end of 1975.

To encourage the public to come forward with information regarding smuggling, government has introduced a scheme for payment of reward to persons for their contribution in effecting seizure of contraband goods.

Toning up Administration

In 1974, a drive was launched for cleaning and toning up the administration by weeding out all employees who had links with persons involved in smuggling or foreign exchange racket. They were either transferred to routine posts or retired prematurely. In some cases disciplinary proceedings were instituted against concerned officers.

The campaign has been further intensified after the promulgation of Emergency.

The value of goods seized during 1973 and 1974 was Rs 35.48 crores and Rs 60.06 crores respectively. Up to November 1975 goods worth Rs 41.28 crores were seized by the Customs authorities. In 1973 and 1974, 2,373 and 3,284 persons respectively were arrested. In 1975, 2,787 persons were arrested up to November.

The various measures so far taken have already had a salutary effect and have significantly reduced smuggling activities.

BANKING

The commercial banking system in India consisted of 74 scheduled[1] commercial banks and 9 non-scheduled commercial banks at the end of December 1974, the former accounting for 99.9 per cent of the aggregate banking business in the country. Of the 74 scheduled commercial banks, 22 are in the public sector. In terms of business, public sector banks occupy a dominating position, their share in the entire banking system being about 84 per cent.

Table 12.8 shows some important indicators in regard to progress of commercial banking in recent years.

[1] According to a notification under the Reserve Bank Act, banks which have not less than Rs 5 lakhs capital and reserve can alone be scheduled to the Reserve Bank.

TABLE 12.8
PROGRESS OF COMMERCIAL BANKING

Important indicators	June 1969	June 1972	June 1973	June 1974	December 1974
Number of commercial banks	89	83	83	83	83
(i) Scheduled commercial banks	73	74	74	74	74
(ii) Non-scheduled commercial banks	16	9	9	9	9
Number of offices in India	8,262	13,622	15,362	16,936	18,180
Population per office (in thousands)	65	40	36	32	30
Aggregate deposits of scheduled commercial banks (Rs crores)	4,646	7,610	9,165	10,706	11,440
Aggregate credit of scheduled commercial banks (Rs crores)	3,599	5,480	6,412	7,827	7,914
Per capita deposit of scheduled commercial banks (Rs)	88	125	167	195	209
Per capita credit of scheduled commercial banks (Rs)	68	97	117	143	144
Deposits as percentage of national income (at current prices)[1]	15.3	21.3	23.5	20.5	21.9[2]

[1] Relates to end of March. [2] Relates to national income for 1973-74

Amongst the public sector banks, the State Bank is the biggest unit. Apart from the main State Bank, there are 7 other banks associated with it as subsidiaries. The State Bank and its subsidiaries account for roughly 29 per cent of the aggregate banking business in the country and 34 per cent of the business conducted by the public sector banks. The other 14 banks in the public sector are known as 'nationalised' banks. They came into the public sector on 19 July 1969. The main objective of nationalisation is to use financial institutions as the instrument for promoting economic and social development in a more purposive manner. Ever since nationalisation there has been a rapid growth of the banking network.

Branch Expansion

The largest number of new branches opened in any year, prior to nationalisation, was 677 in 1968. The number of new branches opened in the years subsequent to nationalisation was 1,369 in 1969, 2,137 in 1970, 1,805 in 1971, 1,763 in 1972, 1,782 in 1973 and 1,693 in 1974.

As against 8,321 branches on 18 July 1969, the total number of commercial bank branches at the end of December 1974 was 18,180. The average population per branch for the country as a whole has been brought down from 65,000[1] on the eve of nationalisation to 30,000[2] at the end of December 1974.

Coverage of Rural Centres

In the selection of centres for opening new branches, there has been a deliberate emphasis on covering potential centres in rural and semi-urban areas, particularly unbanked centres. Of the 9,859 branches added between the date of nationalisation and end of December 1974 as many as 4,771 or 48 per cent were located at rural centres.

In the post-nationalisation period, banking services have been taken to areas hitherto devoid of banking facilities. Of the new branches opened between 19 July 1969 and 31 December 1974, 5,052 were opened at unbanked centres.

On the eve of bank nationalisation, the number of branches in rural areas was 1,860, accounting for 22.4 per cent of the total number of branches in the country. By 31 December 1974 the number of rural branches increased to 6,631, accounting for 36.5 per cent of the total.

[1] Based on 1961 census [2] Based on 1971 census

Regional Rural Banks

Under a Presidential ordinance issued on 26 September 1975 five regional rural banks were established on 2 October 1975 at Bhivani in Haryana, Moradabad and Gorakhpur in Uttar Pradesh, Jaipur in Rajasthan and Malda in West Bengal. It is intended to set up in all 50 such banks covering the entire country. Subsequently some more banks have been opened at other centres.

These banks are meant to meet the credit requirements of small and marginal farmers, agricultural labourers and rural artisans following the measures taken by government for liquidation of rural indebtedness and elimination of moneylenders from the rural scene, under the new Economic Programme.

The share capital of each of these banks will be made up of 50 per cent contributed by the central government, 15 per cent by the state government concerned and 35 per cent by the sponsoring commercial bank. Its operation will be limited to a particular region comprising one or more districts in any state and the lending rate will not be higher than the prevailing rate of cooperative societies in that state.

Lead Bank Scheme

The Lead Bank Scheme was evolved towards the end of 1969 to give concrete shape to the idea of 'area approach' to the development of banking. To enable the banks to assume the role of leadership in an effective and systematic manner, all the districts of the country, except Calcutta, Greater Bombay and Madras, and the union territories of Chandigarh, Delhi and Goa, Daman and Diu were allotted among the public sector banks and three selected private banks. Each of these banks is expected to provide leadership to the other banks and financial institutions located in the districts allotted to it.

The year 1974 witnessed the conclusion of the first phase of the Lead Bank Scheme with the completion of the surveys of all the districts covered under the scheme. District level coordination committees, organised under the Lead Bank Scheme to achieve greater coordination among all the financial institutions meet regularly.

Having completed the basic task of surveying their lead areas and establishing forums for achieving a greater degree of coordination, the lead banks have now started devoting greater attention to the formulation of suitable schemes for implementation in their lead districts.

Deposit Mobilisation

Deposits of all scheduled commercial banks stood at Rs 12,129 crores on 30 May 1975 as against Rs 4,646 crores on 30 June 1969, an increase of over 161 per cent. The rate of increase in 1974 was 13.4 per cent.

Deposit Insurance Corporation

To provide a measure of protection to the small depositors, a Deposit Insurance Corporation was set up in 1962. Every commercial bank in India and every eligible co-operative bank in any of the states and union territories to which the deposit insurance scheme has been extended by the central government is registered as an insured bank. There were 81 insured commercial banks and 445 insured co-operative banks on 31 December 1974. The insured limit is Rs 10,000 per depositor. The insured banks are required to pay a premium at 0.04 per cent per annum to the Corporation on their assessable deposits.

Use of Banks' Resources

Two main uses to which deposit resources of commercial banks are put are (i) investment in government and other approved securities, and (ii) loans and advances commonly known as 'bank credit'.

Bank Credit

There has been a continuous uptrend in bank credit during the years 1970-74. However, the rate of increase in bank credit slowed down somewhat in 1971, slackened further in 1972 and was in both these years lower than that for bank deposits. At the end of 1969, total bank credit stood at Rs 3,616 crores. It increased to Rs 4,452 crores by the end of 1970, Rs 5,052 crores by the end of 1971 and Rs 5,570 crores by the end of 1972. In 1973, inspite of strict credit control measures designed to restrict rise in money supply and the pressure on prices, the increase was quite marked; the bank credit during the year rose by Rs 1,492 crores or 26.8 per cent and stood at Rs 7,062 crores at the end of December 1973. During 1974, strict measures to restrain monetary and credit expansion were taken by the Reserve Bank of India in the context of the overriding need to check the inflationary pressures in the economy. As a result of these measures credit expansion slowed down substantially. At the end of 1974, outstanding credit of scheduled commercial banks stood at Rs 7,914 crores registering an increase of 12.1 per cent. On 30 May 1975, the bank advances reached a level of Rs 8,855 crores.

Export Credit

As an incentive for export effort, the banks provide concessional finance in the form of pre-shipment and post-shipment credit. Since 25 September 1974, a ceiling on interest at 11.5 per cent per annum has been prescribed both for pre-shipment and post-shipment credit other than credit on deferred payment basis, the ceiling rate for which is 8 per cent per annum. The period for which this 11.5 per cent concessional rate of interest can be availed of is 90 days excepting in the case of pre-shipment and post-shipment credit to Western hemisphere where the credit can be availed of up to a period of 120 days. In the event of the period of credit extending beyond the stipulated period to which ceiling rate would apply, interest rate of such extended period will be charged at not less than the minimum rate of interest, which is 12.5 per cent at present. Recently the Reserve Bank has further liberalised the terms of export credit. If pre-shipment credit is to be given by the banks for a period longer than 90 days for reasons which are beyond the control of the exporter, banks are required to charge a rate of interest not exceeding 2 per cent above the concessionary ceiling rate of 11.5 per cent, for a further period of 45 days. In respect of specified medium and heavy engineering goods, the period of credit at concessionary rate has been extended from 90 to 180 days. For such industries credit will be available at interest rate not exceeding 2 per cent above the concessionary rate for a further period of 90 days.

Banks are eligible for interest subsidy of one and a half per cent per annum under the Export Credit (Interest Subsidy Scheme), 1968 on all export credits, provided the rate of interest charged thereon does not exceed the prescribed concessionary ceiling rates. No interest subsidy is payable in respect of export credit to which the ceiling rate is not applicable. During 1974-75, 45 banks availed of interest subsidy of Rs 7.25 crores.

Credit Authorisation Scheme

To ensure proper use of bank credit, the credit authorisation scheme was introduced by the Reserve Bank of India in 1965. Under the scheme, all the scheduled commercial banks are required to obtain the Reserve Bank's prior authorisation before sanctioning any fresh credit limits (including commercial bill discounts but excluding letters of credit and guarantee limits) of Rs 1 crore or more to a single party

or any limit that would take the total limit enjoyed by such party from the entire banking system (including co-operative sector) to Rs 1 crore on secured or insecured basis. The scheme also covers individual term credit limits exceeding Rs 25 lakhs as well, where the term of repayment exceeds three years, irrespective of the totality of credit limits available to the party from the entire banking system.

During 1973-74, the scheme was extended to cover advances to public sector undertakings, including State Electricity Boards, as also advances against the guarantee of central and state governments. These advances were earlier exempted from the requirements of Reserve Bank's prior authorisation. Banks are now required to obtain such authorisation under the scheme for sanctioning, to the above category of borrowers, any credit limits (including commercial bill discounts) of Rs 3 crores or more or any limit that would take the total limits enjoyed by such a party from the entire banking system to Rs 3 crores or more, on secured or unsecured basis.

Advances to Neglected Sectors

The extension of credit to small borrowers in the hitherto neglected sectors of the economy is one of the principal tasks assigned to the public sector banks. To achieve this objective the banks have drawn up schemes to extend credit to small borrowers in sectors like agriculture, small-scale industry, road transport, retail and small business, which traditionally had very little share in the credit extended by the banks. The number of borrowal accounts with the public sector banks for these categories of borrowers increased by more than 11 times, *i.e.*, from 2.60 lakhs to 29.86 lakhs during June 1969-December 1974. The amount outstanding during the same period increased from Rs 441 crores to Rs 1,875 crores. The share of these sectors in the total credit at the end of December 1974 was 28.1 per cent against 14.5 per cent in June 1969.

Table 12.9 shows the achievements of the public sector banks in stepping up the flow of credit to various neglected sectors.

TABLE 12.9 CREDIT FLOW TO NEGLECTED SECTORS

Sector	No. of borrowal accounts		Amount outstanding (Rs crores)	
	June 1969	Dec. 1974[1]	June 1969	Dec. 1974[1]
Agriculture (excluding plantations)				
(a) Direct finance	1,60,020	19,22,911	40.21	478.27
(b) Indirect finance	4,461	2,17,015	122.12	228.93
Small scale industry[2]	50,850	2,13,429	251.07	909.73
Road and water transport operators	2,324	68,201	5.49	95.22
Retail trade and small business	33,241	3,51,384	19.37	125.43
Professional and self employed	7,769	1,99,171	1.91	33.58
Education	1,477	13,705	0.80	3.82
TOTAL	2,60,142	29,85,816	440.97	1,874.98

[1] Provisional. [2] Number of units.

Bank Finance for Agriculture

To step up the flow of credit to the agricultural sector, public sector banks have extended their geographical coverage, strengthened technical field-staff and organisational structure, introduced special schemes and simplified application forms and lending procedures. They are concentrating their efforts in compact areas through intensive programmes. As part of the strategy of 'area approach', the State

Bank of India and its subsidiaries have opened 177 agricultural development branches and financed 2,54,299 farmers up to 31 December 1974 with total outstanding of Rs 50.55 crores.

Banks have ensured that small and marginal farmers and agricultural labourers are not denied bank finance for their genuine credit requirements for want of adequate security and their credit needs are met on priority basis.

The scheme of financing primary agricultural credit societies by commercial banks has been extended to more states and is now in operation in Andhra Pradesh, Bihar, Haryana, Jammu and Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Uttar Pradesh and West Bengal.

Credit Guarantee Corporation of India

To encourage banks to undertake financing of small borrowers on a much larger scale without any excessive risks, the government set up the Credit Guarantee Corporation of India in 1971 to provide guarantee cover to the banks in respect of small loans. The Corporation operates three types of guarantee schemes, *viz.*, (i) Small Loans Guarantee Scheme, (ii) Small Loans (Financial Corporations) Guarantee Scheme, and (iii) Service Co-operative Societies Guarantee Scheme.

The credit facilities covered under the various schemes of the Corporation as on the last Friday of June 1974 amounted to Rs 463.37 crores.

Half-a-million Jobs Programme

Public sector banks have made a good beginning in extending assistance to the educated unemployed under the Half-a-million Jobs Programme. As at the end of June 1974, these banks had sanctioned 15,542 applications under the scheme. The amount outstanding was Rs 11.75 crores.

Co-ordination among Public Sector Banks

For better co-ordination among public sector banks and administrative agencies of the state governments six regional consultative committees, consisting of representatives of state governments and union territories and chairmen of nationalised banks have been constituted. These committees review banking development in their respective regions. Similarly, state-level co-ordination committees have been set up.

Board of Directors of Public Sector Banks

In the new Boards of Directors of nationalised banks, representatives of staff and bank officers have also been associated in the capacity of Directors. The new Boards of Directors also include experts from different fields such as agriculture, small industries and handicrafts.

Differential Interest Rate Scheme

To help the weaker sections of society, a scheme of differential interest rate has been in operation since 1972. Under the scheme public sector banks make funds available to certain categories of borrowers in industrially backward districts at a concessional rate of 4 per cent for their productive endeavours.

As at the end of December 1974, these banks had assisted 3,03,163 borrowers and the amount outstanding was Rs 13.03 crores.

Foreign Branches of Indian Banks

Sixty-six branches of eight Indian commercial banks were operating in foreign countries during 1974-75, the largest concentration being in UK, Fiji, Kenya, Hongkong, Mauritius and Singapore. These banks mainly cater to the demands of trade and commerce between India and these countries and also meet the needs of the sizable populations of Indian origin in these countries.

The scope of Indian banks' activities in the continent of Europe has been widened with the opening of a branch of the State Bank of India at Frankfurt. With the opening of branches of the Bank of Baroda at Dubai and Abu Dhabi for the first time an Indian Bank has established its presence in the Gulf area. The State Bank of India has also a branch now in Maladive Islands.

RESERVE BANK Prior to the establishment of the Reserve Bank of India in 1935, the Imperial Bank of India,though primarily a commercial bank,performed certain central banking functions and in particular acted as a banker to Government.

The Reserve Bank was originally constituted as a shareholders' institution with a share capital of Rs 5 crores. The capital has remained unchanged to this day. The entire share capital was, in the beginning, owned by private shareholders with the exception of shares of the nominal value of Rs 2.2 lakhs, which were allotted to the central government. Subsequently the entire share capital of the Bank was acquired by the central government against compensation to the shareholders and from 1 January 1949, it became a state-owned institution.

Functions The main function of the Bank is to regulate the issue of Bank notes and keep reserves for securing monetary stability. The Bank is the sole authority for the issue of currency in India other than one rupee coins/notes and subsidiary coins. As the agent of the central government, it undertakes the distribution of one rupee notes and coins as well as small coins issued by the Government of India.

The Bank acts as banker to Government of India, state governments, commercial banks and to some of the financial institutions including state co-operative Banks. It formulates and administers monetary policy in order to influence the level of aggregate demand for goods and services by varying the cost and availability of credit. The Reserve Bank also plays an important role in the maintenance of the exchange value of the rupee, and acts as an agent of the government in respect of India's membership of the International Monetary Fund. The Bank now performs a variety of developmental and promotional functions.

CORPORATE SECTOR

The number of joint stock companies incorporated under the Companies Act, 1956 and at work in India on 31 March 1975 was 43,089. The total paid-up capital of the companies limited by shares, which numbered 41,763, amounted to Rs 7,397.7 crores. Of these, 7,493 were public limited and 34,270 were private limited companies having a paid-up capital of Rs 2,231.8 crores and Rs 5,165.9 crores respectively.

Table 12.10 shows the number and paid-up capital of the companies functioning in 1951, 1961, 1966 and 1969 onwards.

Table 12.11 shows the region/state-wise distribution of companies at work on the basis of the location of their registered offices and of the new companies registered during 1974-75. During 1974-75 3,699 companies limited by shares, with an authorised capital of Rs 916.7 crores, were registered under the Companies Act, 1956. Of these, 369 companies were public limited and 3,330 were private limited having an authorised capital of Rs 303.1 crores and Rs 613.6 cr ores respectively.

TABLE 12.10
COMPANIES AT WORK

As on 31 March	Companies with share capital						Associations not for profit (registered mostly as companies limited by guarantee)
	Public		Private		Total		
	No.	Paid-up capital (Rs crores)	No.	Paid-up capital (Rs crores)	No.	Paid-up capital (Rs crores)	No.
1951	12,568	566.5	15,964	208.9	28,532	775.4	1,213
1961	6,702	948.2	19,447	870.3	26,149	1,818.5	1,169
1966	6,392	1,465.7	20,286	1,579.2	26,678	3,044.9	1,161
1969[1]	6,535	1,833.9	21,438	2,026.4	27,973	3,860.3	1,188
1970[1]	6,517	1,870.8	22,443	2,107.5	28,960	3,978.3	1,206
1971[1]	6,534	1,908.3	23,878	2,393.1	30,412	4,301.4	1,220
1972[1]	6,678	1,956.1	25,885	2,696.7	32,563	4,652.8	1,242
1973[1]	6,841	2,059.0	28,032	3,286.1	34,873	5,345.1	1,262
1974[1]	7,174	2,131.3	31,161[2]	4,943.8	38,335[2]	7,075.1	1,294
1975[1]	7,493	2,231.8	34,270[3]	5,165.9	41,763[3]	7,397.7	1,326

[1] Provisional. [2] Includes one company with unlimited liability registered during October 1973 in Delhi. [3] Includes 3 companies with unlimited liability registered during December 1974 in Maharashtra.

Capital Issues and Project Costs

During 1974-75, 59 non-government non-financial public limited companies issued capital through prospectuses amounting to Rs 23.43 crores. Of this, Rs 21.93 crores were issued in the form of share capital (Rs 17.43 crores as equity and Rs 4.50 crores as preference shares) and Rs 1 crore as debentures and Rs 0.50 crore as convertible bonds. As compared to this, 131 companies had issued capital amounting to Rs 61.66 crores—Rs 55.04 crores in the form of shares and Rs 5.62 crores as debentures and Rs 1 crore as convertible bonds during 1973-74. There was, thus, a decrease of Rs 38.23 crores in the amount of capital issued during 1974-75. Out of the total capital issued during 1974-75, Rs21.49 crores (91.7 per cent) was offered to the public, of which Rs 19.94 crores (92.8 per cent) was underwritten. The total project cost of these companies issuing capital during the year was estimated to be about Rs 100.22 crores as compared to Rs 220.40 crores in the preceding year.

Companies which Ceased to Work

The number of companies which went into liquidation or were struck off under section 560(5) of the Companies Act, 1956 or otherwise became defunct or ceased to work during 1974-75 was 270. Comparative figures for earlier years were: 1965-66—915, 1969-70—523, 1970-71—472, 1971-72—373, 1972-73—550 and 1973-74—315.

Government Companies

Table 12.12 gives the number and paid-up capital of government companies at work for 1962, 1965 and 1969 onwards.

Foreign Companies

On 31 March 1975, there were 510 foreign companies in India as defined under section 591 of the Companies Act, 1956 (*i.e.*, joint stock companies incorporated abroad but having a place of business in India). The distribution of these companies according to their country of origin was—UK 301; USA 81; Japan 20; West Germany 12; Switzerland 9; France, Canada and Holland 7 each; Hongkong, Pakistan and Bangladesh 6 each; Australia and Italy 5 each; Sweden 4, Belgium, Nepal, Yugoslavia, Uganda and Singapore 3 each; Panama, Bahama Island, Thailand and Lebanon 2 each; Sri Lanka, Kenya,

TABLE 12.11
REGION/STATE-WISE DISTRIBUTION OF COMPANIES AT WORK

Region/State	Companies at work as on 31 March 1975		Companies registered during April 1974-March 1975	
	No.	Paid-up capital (Rs crores)	No.	Authorised capital (Rs crores)
Eastern Region				
Assam	588	57.5	112	11.1
Meghalaya ..	64	7.9	8	3.6
Bihar	685	1,582.3	92	43.6
Manipur	7	0.4	—	—
Nagaland	11	16.0	—	—
Orissa	306	62.2	47	11.0
Tripura	12	0.1	4	2.5
West Bengal ..	10,759	765.8	594	68.0
Andaman & Nicobar Islands	1	—	—	—
TOTAL ..	12,433	2,492.2	857	139.8
Northern Region				
Haryana	365	21.2	24	9.3
Himachal Pradesh ..	105	7.0	19	9.4
Jammu & Kashmir ..	124	21.4	10	5.3
Punjab	1,123	23.9	82	10.5
Rajasthan	672	68.8	55	4.8
Uttar Pradesh ..	1,907	139.3	210	37.4
Chandigarh ..	142	16.2	22	23.3
Delhi	4,765[1]	2,085.4	489	198.4
TOTAL ..	9,203	2,383.2	911	298.4
Southern Region				
Andhra Pradesh ..	1,143	211.0	166	64.5
Karnataka	1,624	321.1	229	37.7
Kerala	1,316	177.8	88	48.9
Tamil Nadu ..	3,707	422.2	300	73.0
Pondicherry ..	72	2.5	8	3.1
TOTAL ..	7,862	1,134.6	791	227.2
Western Region				
Gujarat	2,116[2]	313.4	185	39.2
Madhya Pradesh ..	596	67.7	60	89.6
Maharashtra ..	9,358[1]	987.5	872[1]	114.5
Goa, Daman & Diu ..	195	19.1	22	8.0
Dadra and Nagar Haveli	—	—	1	—
TOTAL ..	12,265	1,387.7	1,140	251.3
GRAND TOTAL ..	41,763	7,397.7	3,699	916.7

[1] Includes one company registered with unlimited liability in Delhi in 1973-74 and three in Maharashtra in 1974-75 having authorised capital of Rs 15 lakhs and Rs 30 lakhs (put together) respectively. [2] Includes Dadra and Nagar Haveli

TABLE 12.12
GOVERNMENT COMPANIES AT WORK

As on 31 March	Public		Private		Total	
	No.	Paid-up capital (Rs crores)	No.	Paid-up capital (Rs crores)	No.	Paid-up capital (Rs crores)
1962	41	23.5	113	606.2	154	629.7
1965	54	51.5	129	1,062.8	183	1,114.3
1969	81	121.9	178	1,573.0	259	1,714.9
1970	81	130.2	201	1,660.4	282	1,790.6
1971	91	133.2	223	1,931.3	314	2,064.5
1972[1]	107	156.0	245	2,213.1	352	2,369.1
1973[1]	126	219.0	264	2,779.4	390	2,998.4
1974[1]	147	249.1	303	4,396.0	450	4,645.1
1975[1]	187	285.0	358	4,575.7	545	4,860.7

[1] Provisional.

Kuwait, Liberia, Luxembourg, Philippines, Tanzania, Iran, Aden, New Zealand and Greece one each.

INSURANCE

LIFE INSURANCE

The Life Insurance Corporation of India came into existence on 1 September 1956. The Corporation had 39 divisional offices, 618 branch offices, 41 sub-offices and 103 development centres in India on 31 March 1974.

Business by LIC

During 1973-74, LIC issued 20.52 lakh new policies assuring Rs 2,586 crores as against 20.23 lakh policies assuring Rs 2,075 crores issued during 1972-73—an increase of one per cent in the number of policies and an increase of 24.6 per cent in sum assured. Of the total number of policies, 6.43 lakh policies assuring Rs 498.17 crores were issued in rural areas and 9.75 lakh policies assuring Rs 447.26 crores were issued under the non-medical schemes.

The Life Insurance business in force at the end of each of the five accounting periods from 1970 is given below:

TABLE 12.13
LIFE INSURANCE—TOTAL BUSINESS

As on 31 March	In India		Out of India		Total	
	No. of policies (lakhs)	Sums assured & bonuses (Rs crores)	No. of policies (lakhs)	Sums assured & bonuses (Rs crores)	No. of policies (lakhs)	Sums assured & bonuses (Rs crores)
1970	139.39	6,226	1.02	122	140.41	6,348
1971	146.92	6,952	0.92	115	147.85	7,067
1972	157.11	8,082	0.88	120	157.99	8,202
1973	167.92	9,204	0.84	121	168.76	9,325
1974	179.43	10,725	0.79	123	180.22	10,848

Working Results

On 31 March 1974 the total income of the Corporation after deduction of income tax at source amounted to Rs 616.21 crores of which the premium income accounted for Rs 454.88 crores. The total outgo amounted to Rs 270.47 crores. The Life Fund stood at Rs 2,704.42 crores on 31 March 1974.

Financing of Housing Schemes

Loans amounting to Rs 19.75 crores were advanced by LIC to state governments for financing various housing schemes during 1973-74. A sum of Rs 35.70 crores was advanced to the apex co-operative housing finance societies and other authorities for financing housing co-operatives in various states.

The 'Own Your Home' scheme is in operation at all places where the Corporation has either a branch office or a sub-office. During 1973-74, 1,515 loans amounting to Rs 4.75 crores were sanctioned to policy-holders for construction or purchase of houses.

Other schemes for financing house construction include (i) loans to public limited companies for the purpose of providing houses to their employees; and (ii) loans to co-operative housing societies of employees of (a) public limited companies, and (b) public sector undertakings.

The Corporation also grants loans to co-operative housing societies formed by its own employees and also to individual employees for purchase or construction of houses. The Corporation has started construction of a township at Jeevan Bima Nagar at Borivli, a suburb of Bombay where the first phase of 1,388 flats has been completed

and the second phase providing 128 flats is nearing completion. The Corporation has also undertaken the construction of another township at Bangalore.

The total assistance given by the Corporation for the development of housing in India by way of loans to state governments and apex co-operative housing finance societies and loans under other schemes up to 31 March 1974 amounted to Rs 495 crores. This included expenditure by the Corporation on its own building construction.

Investment

The total book value of the investments of the Corporation at the end of March 1974 amounted to Rs 2,453.86 crores.

GENERAL INSURANCE

The process of nationalisation of general insurance business, which was initiated with the take-over on 13 May 1971 of the management of the undertakings of Indian and foreign insurers, was completed on 1 January 1973. On that day the shares of Indian insurance companies and the undertakings of other insurers, namely, mutual companies, co-operative societies, the General Insurance Department of the Life Insurance Corporation and foreign insurers, were acquired under the General Insurance Business (Nationalisation) Act, 1972. The law provides for payment of amounts totalling Rs 38.05 crores for the acquisition of these shares and undertakings.

In pursuance of the Insurance Business (Nationalisation) Act, the General Insurance Corporation of India was registered as a government company on 22 November 1972 for the purpose of superintending, controlling and carrying on general insurance business. The authorised capital of the Corporation is Rs 75 crores and its paid-up capital on 1 January 1975 was Rs 38.55 crores.

On 1 January 1973, the Indian insurance companies became subsidiaries of the Corporation and the undertakings of the remaining insurers were transferred to one or other of these companies. On 1 January 1974 all the nationalised general insurance companies were merged into four subsidiaries of the Corporation. The General Insurance Corporation and its subsidiaries have the exclusive privilege of carrying on general insurance business in India. However, some state governments (Gujarat, Karnataka, Kerala and Maharashtra) continue to carry on their existing lines of insurance business in respect of the properties belonging to them and their undertakings, semi-government bodies and boards and also to undertakings in which the state governments have substantial financial interest.

13 PLANNING

Planning in India derives its objectives and social premises from the Directive Principles of State Policy set forth in the Constitution. The public and private sectors of the economy are viewed as complementary. The private sector covers not only organised industry but also small-scale industries, agriculture, trade and a great deal of activity in housing and construction and other fields. Individual effort and private initiative are considered both necessary and desirable, the policy being to assist development on the basis of voluntary co-operation to the utmost extent. Economic planning also envisages a growing public sector with massive investments in basic and heavy industries.

The Government of India appointed a Planning Commission in 1950 to prepare a blueprint of development taking an overall view of the needs and resources of the country. The composition of the Commission as in July 1975 was as follows:

Smt Indira Gandhi	Prime Minister and Chairman
P.N. Haksar	Deputy Chairman
C. Subramaniam	Minister of Finance
I.K. Gujral	Minister of State for Planning
S. Chakravarty	Member
B. Sivaraman	Member

THE FIRST FOUR PLANS

Objectives

The First Five Year Plan (1951-52 to 1955-56) had a two-fold objective: to correct the disequilibrium in the economy caused by the Second World War and the partition of the country and to initiate simultaneously a process of all-round balanced development which would ensure a rising national income and a steady improvement in the living standards over a period of time. Since the country had to import foodgrains on a large scale in 1951 and there were inflationary pressures in the economy, the plan accorded the highest priority to agriculture, including irrigation and power projects. About 44.6 per cent of the total outlay of Rs 2,069 crores in the public sector (later raised to Rs 2,356) crores was allotted for their development. The plan also aimed at increasing the rate of investment from 5 per cent to about 7 per cent of the national income.

In 1954, Parliament declared that the broad objective of economic policy should be to achieve a 'socialist pattern of society' under which the basic criteria for determining the lines of advance would be social gain and greater equality in incomes and wealth and not private profit. The Second Five Year Plan (1956-57 to 1960-61), therefore, sought to promote a pattern of development which would ultimately lead to the establishment of a socialistic society in India. In particular, it stressed that the benefits of economic development should accrue more to the relatively less privileged sections of society, and there should be a progressive reduction in the concentration of incomes, wealth and economic power.

The main aims of the plan were: (i) an increase of 25 per cent in the national income; (ii) rapid industrialisation with particular emphasis on the development of basic and heavy industries; (iii) large expansion of employment opportunities; and (iv) reduction of inequalities in

income and wealth and a more even distribution of economic power. The plan also aimed at increasing the rate of investment from about 7 per cent of the national income to 11 per cent by 1960-61. The plan laid special stress on industrialisation—increased production of iron and steel, heavy chemicals, including nitrogenous fertilizers and development of heavy engineering and machine-building industry.

The Third Five Year Plan (1961-62 to 1965-66) aimed at securing a marked advance towards self-sustaining growth. Its immediate objectives were to:(i) secure an increase in the national income of over 5 per cent per annum, and at the same time ensure a pattern of investment which could sustain this rate of growth during subsequent plan periods; (ii) achieve self-sufficiency in foodgrains and increase agricultural production to meet the requirements of industry and exports; (iii) expand basic industries like steel, chemicals, fuel and power and to establish machine-building capacity, so that the requirements of further industrialisation could be met within a period of ten years or so mainly from the country's own resources; (iv) utilise fully the man-power resources of the country and ensure a substantial expansion in employment opportunities; and (v) establish progressively greater equality of opportunity and bring about reduction in disparities of income and wealth and a more even distribution of economic power. The national income was to increase by about 30 per cent from Rs 14,500 crores in 1960-61 to about Rs 19,000 crores by 1965-66 (at 1960-61 prices) and per capita income by about 17 per cent from Rs 330 to Rs 385 during the same period.

The situation created by the Indo--Pakistan conflict, two successive years of severe drought, devaluation of the currency, general rise in prices and erosion of resources available for plan purposes delayed finalisation of the Fourth Five Year Plan. Instead, between 1966 and 1969, three Annual Plans were formulated within the framework of the Draft Outline of the Fourth Plan. They took into account the conditions prevailing at the time. The state of the economy and the non-availability of financial resources for plan purposes kept down the size of development outlay during this period.

The Fourth Plan (1969-74) aimed at accelerating the tempo of development in conditions of stability and at reducing fluctuations in agricultural production as well as the impact of uncertainties of foreign aid. It aimed at raising the standard of living of the people through programmes which at the same time were designed to promote equality and social justice. The plan laid particular emphasis on improving the condition of the less privileged and weaker sections of the society, especially through the provision of employment and education. Efforts were also directed towards reduction of concentration and a wider diffusion of wealth, income and economic power.

The plan aimed at increasing the net domestic product at 1968-69 factor cost from Rs 29,071 crores in 1969-70 to Rs 38,306 crores in 1973-74. In terms of 1960-61 prices, this implied an increase from Rs 17,351 crores in 1968-69 to Rs 22,862 crores in 1973-74. The average annual compound rate of growth envisaged was 5.7 per cent.

Outlay and Investment

The public sector outlay as planned in the First, Second and Third Plans was Rs 2,356 crores, Rs 4,800 crores and Rs 7,500 crores while the actual expenditure was Rs 1,960 crores, Rs 4,672 crores and Rs 8,577 crores respectively. The investment by the private sector in the First, Second and Third Plans was Rs 1,800 crores, Rs 3,100 crores and Rs 4,190 crores respectively. The total public sector outlay during

the three annual plans was Rs 6,756.50 crores. The Fourth Plan outlay envisaged originally was Rs 24,882 crores. It consisted of the public sector outlay of Rs 15,902 crores (including Rs 13,655 crores investment) and private sector investment of Rs 8,980 crores. A mid-term review of the plan was made in 1971 and the outlay for the public sector was revised to Rs 16,201 crores. The total public sector outlay during the Fourth Plan is now estimated at Rs 15,724 crores.

The public sector outlay during the first four plans and the financing of plan outlays in the public sector are indicated in Tables 13.1 and 13.2.

TABLE 13.1 PUBLIC SECTOR OUTLAY DURING THE FIRST FOUR PLANS (INCLUDING STATES' SHARES)

(Rs crores)

Head	First Plan Total	Second Plan Total	Third Plan Total	Fourth Plan (anticipated) Total
1. Agriculture and allied sectors	290 (14.8)	549 (11.7)	1,089 (12.7)	2,353.5 (15.0)
2. Irrigation and flood control	434 (22.2)	430 (9.2)	665 (7.8)	1,272.00 (8.1)
3. Power	149 (7.6)	452 (9.7)	1,252 (14.6)	2,911.8 (18.5)
4. Village and small industries	42 (2.1)	187 (4.0)	241 (2.8)	244.7 (1.6)
5. Industry and minerals	55 (2.8)	938 (20.1)	1,726 (20.1)	2,873.6 (18.3)
6. Transport and communications	518 (26.4)	1,261 (27.0)	2,112 (24.6)	3,062.00 (19.5)
7. Others	472 (24.1)	855 (18.3)	1,492 (17.4)	3,006.2 (19.0)
of which				
(a) Education and scientific research	149 (7.6)	273 (5.8)	660 (7.7)	912.9 (5.8)
(b) Health	98 (5.0)	216 (4.6)	226 (2.6)	336.7 (2.1)
(c) Family planning	—	—	25 (0.3)	277.9 (1.7)
TOTAL	1,960 (100.0)	4,672 (100.0)	8,577 (100.0)	15,724.00 (100.0)

Note: Figures in brackets represent percentage to outlay in the concerned sector.

Achievements

During the First Plan, owing largely to increase in agricultural production, the national income went up by 18 per cent as against the target of 12 per cent. The increase in the Second Plan was 20 per cent as against the target of 25 per cent. In the Third Plan, national income (revised series) at 1960-61 prices rose by 20 per cent in the first four years but declined by 5.7 per cent in the last year. Per capita real income in 1965-66 remained the same as in 1960-61 owing to a 2.5 per cent rise in population.

The index of agricultural production at 1950-51 base rose to 122.2 at the end of the First Plan and 148.7 at the end of the Second Plan. In the Third Plan, the performance of agriculture was not satisfactory. Widespread drought in 1965-67 slowed down the rate of growth and led to increased imports of food and other items. The index of agricultural production receded to 139.2 in 1965-66.

Gross irrigated area increased from 2.26 crore hectares in 1950-51 to 2.56 crore hectares at the end of the First Plan, 2.80 crore hectares at the end of the Second Plan and 3.11 crore hectares at the end of the Third Plan. The total installed power capacity increased from 23 lakh kw in 1951 to 34.2 lakh kw at the end of the First Plan, 56.5

TABLE 13.2

FINANCING OF PLAN OUTLAY IN THE PUBLIC SECTOR

(*Rs crores*)

Item	First Plan		Second Plan		Third Plan		Fourth Plan	
	Original estimates	Actuals	Original estimates	Actuals	Original estimates	Actuals	Original estimates	Latest estimates
A. *Mainly through own resources*	740 (35.7)	725 (38.4)	1,350 (28.1)	1,230 (26 3)	2,810 (37.5)	2,908 (33.9)	7,102 (44.7)	5,475 (33.9)
1. Balance from current revenues at pre-plan rates of taxation	570	382	350	11	(—)550	(—)419	1,673	(—)236
2. Additional taxation, including measures to increase the surplus of public enterprises	—	255	850	1,052	1,710	2,892	3,198	4,280
3. Retained profits of Reserve Bank	—	—	—	—	—	—	202	296
4. Surplus of public sector undertakings, exclusive of yield from measures adopted for raising additional resources for the plan	170	115	150	167	550	435	2,029	1,135
(a) Railways	170	115	150	167	100	62	265	(—)165
(b) Others	—	—	—	—	450	373	1,764	1,300
B. *Mainly through domestic borrowings*	808 (39.1)	1,019 (52.0)	2,650 (55.2)	2,393 (51.2)	2,490 (33.2)	3,246 (37.9)	6,186 (38.9)	8.598 (53.2)
1. Loans from the public, including state enterprises' borrowing from market and LIC (net)	115	204	700	756	800	823	2,326	3,145
2. Small savings	225	243	590	422	600	565	769	1,162
3. Annuity deposits, compulsory deposits, prize bonds and gold bonds	—	—	—	—	—	117	(—)104	(—) 98
4. State provident funds	45	92		175	265	336	660	874
5. Steel equalisation funds (net)	—	—	250	40	105	34	—	—
5. Miscellaneous capital receipts (net)	133	147		46	170	238	1,685	1,455
7. Deficit financing	290	333	1,200	954	550	1,133	850	2,060
C. *Total domestic resources* (A+B)	1,548 (74.8)	1,771 (90.4)	4,000 (83.3)	3,623 (77.5)	5,300 (70.7)	6,154 (71.8)	13,288	14,073 (87.1)
D. *External assistance*	521 (25.2)	189 (9.6)	800 (16.7)	1,049 (22.5)	2,200 (29.3)	2,423 (28.2)	2,614 (16.4)	2,087 (12.9)
E. *Total resources* (C+D)	2,069 100.0)	1,960 (100.0)	4,800 (100.0)	4,672 (100.0)	7,500 (100.0)	8,577 (100.0)	15,902 (100.0)	16,160 (100.0)

Note: Figures in brackets are percentages to total.

lakh kw at the end of the Second Plan and 101.71 lakh kw at the end of the Third Plan.

The net output in organised manufacturing industries nearly doubled during the first two plans. The share of the public sector industries went up from 1.5 per cent at the beginning of the First Plan to 8.4 per cent at the end of the Second Plan. Much of this increase was in key industries, such as, steel, coal mining and heavy chemicals. In the Third Plan, a growth rate of 8 to 10 per cent was maintained in the first four years of the Plan, but it declined to 5.3 per cent in the fifth year owing to the dislocation caused by the war with Pakistan and disruption in the flow of foreign aid. The overall annual growth rate for the entire plan period was 8.2 per cent against the target of 11 per cent. However, there was continuous increase and diversification of production capacity, specially in steel and aluminium, machine tools, industrial machinery, electrical and transport equipment, fertilizers, drugs and pharmaceuticals and petroleum products. All this contributed to the strengthening of the industrial structure.

School enrolment rose from 2.35 crores in 1950-51 to 3.14 crores at the end of the First Plan, 4.46 crores at the end of the Second Plan and 6.60 crores in 1965-66.

As against projected overall rate of growth of 5.7 per cent per annum during the Fourth Plan, the realised rate of growth is estimated at 5.7 per cent in 1969-70, 4.9 per cent in 1970-71, 1.4 per cent in 1971-72 (-) 0.9 per cent in 1972-73 and 3.1 per cent in 1973-74.

The performance of key sectors of the economy like agriculture and industry during each year of the plan period showed varying trends. The target of foodgrains production for the Plan was 12.9 crore tonnes. According to latest estimate the likely achievement in 1973-74 is 10.4 crore tonnes. The main reason for the shortfall in production was climatic. The breakthrough in wheat production was the major achievement of the new agricultural strategy carried forward in the Plan. In the case of rice so far there is no visible technological breakthrough in productivity in the traditional rice growing areas. The growth rate of pulses and oil seeds were also below plan expectations.

The Fourth Plan was formulated at a time when the economy was recovering from a period of recession and there was considerable unutilised capacity in the industrial sector. Better utilisation of the capacity already created was, therefore, a major objective of the Plan. In the industrial field though the Plan envisaged an annual rate of growth of 8 to 10 per cent, the rate of growth achieved in successive years during the plan period was rather low. In the first four years of the plan period the rate of growth was 7.3 per cent, 3.1 per cent, 3.3 per cent and 5.3 per cent respectively while in 1973-74, the rate of growth is estimated at less than 1 per cent. The utilisation of available capacities in many industries was hindered by operational problems and shortages of key raw materials, power and transport bottlenecks

FIFTH FIVE YEAR PLAN

Removal of poverty and attainment of self-reliance are the two major objectives of the Fifth Plan (1974-79). The plan aims at raising the consumption standards of the lowest 30 per cent of the population, from Rs 25 per month to a minimum desirable standard of Rs 40.6 at 1972-73 prices. A major thrust of policy would be to provide

vastly expanded opportunities of employment to the weaker sections in general and to agricultural labourers and small and marginal farmers in particular. Development programmes have been prepared for backward areas, including hills and tribal areas, for the uplift of the backward classes through the mechanism of specially drawn-up sub-plans as an integral part of the state plans. A national programme to meet the minimum needs of the poorest sections of society has been formulated. The plan aims at accelerated rate of growth of agricultural and industrial output, and provides for non-inflationary financing of development. An overall rate of growth of 5.5 per cent per annum in the national product is envisaged.

A tentative outlay of Rs 53,411 crores is envisaged for the Fifth Five Year Plan. Of this, Rs 37,250 crores have been allocated to public sector and Rs 16,161 crores to private sector. Table 13.3 indicates the distribution of public sector outlay under various heads of development among the centre, states and union territories.

TABLE 13.3
PUBLIC SECTOR OUTLAY DURING THE FIFTH PLAN

(*Rs crores*)

	Head	Centre[1]	States	Union Territories	Total
1	Agriculture	1,946	2,717	67	4,730
2	Irrigation	140	2,515	26	2,681
3	Power	738	5,343	109	6,190
4	Mining and manufacturing	8,180	742	17	8,939
5	Construction	25	—	—	25
6	Transport and communications	5,727	1,297	91	7,115
7	Trade and storage	194	11	—	205
8	Housing and real estate	237	338	25	600
9	Banking and insurance	90	—	—	90
10	Public administration and defence	60	30	8	98
11	Other services:	1,953	3,580	257	5,790
	(i) Education	484	1,155	87	1,726
	(ii) Health	253	517	26	796
	(iii) Family planning	516	—	—	516
	(iv) Nutrition	70	330	—	400
	(v) Urban development	252	272	19	543
	(vi) Water supply	16	924	82	1,022
	(vii) Social welfare	200	26	3	229
	(viii) Welfare of backward classes	55	167	4	226
	(ix) Labour welfare	15	38	4	57
	(x) Miscellaneous	92	151	32	275
12	Science and technology[2]	419	—	—	419
13	Hill and tribal areas	—	500	—	500
	TOTAL	19,577	17,073	600[3]	37,250[4]

[1] Includes centrally-sponsored schemes.
[2] Includes provision for the Departments of Atomic Energy, Space, Science and Technology, Supply, Council of Scientific and Industrial Research and Anthropological Survey. In addition, a provision of Rs 614 crores for science and technology is included in respective sectors.
[3] Tentative.
[4] The sectoral outlay totals up to Rs 37,382 crores. A reduction of Rs 132 crores will be effected to keep the total at Rs 37,250 crores or alternatively additional resources to this extent will be found.

Within the constraints of the overall resources, sectoral distribution has been designed to optimise the use of these resources consistent with varied objectives in different sectors. The overall guiding principles were: (i) speedy completion of projects and programmes already under way; (ii) fullest utilisation of capacities and potentials already created so that the investment therein yields better return; (iii) achievement of the inescapable minimum targets of additional capacity in

the core sectors on which the accelerated pace of growth in the coming years would largely depend; and (iv) attainment of certain minimum levels of development for the economically weaker sections, especially the last three deciles of population.

The sources for financing public sector outlay in the Fifth Five Year Plan are indicated in Table 13.4.

TABLE 13.4
FINANCING OF PLAN OUTLAY IN PUBLIC SECTOR

Item	At 1972-73 prices (Rs crores)
1. Central and state governments' resources on revenue account at 1973-74 rates of taxation	7,348
(a) Balance from current revenues	5,612
(b) Transfer from current revenues to funds	1,736
(i) Sinking funds	1,484
(ii) Other funds (net)	252
2. Gross surplus of public enterprises	5,988
(a) Centre	4,331
(b) States	1,657
3. Additional resource mobilisation	6,850
(a) Centre	4,300
(b) States	2,550
4. Market borrowings of government, public enterprises and local bodies	7,232
5. Small savings	1,850
6. State provident funds	1,280
(a) Centre	680
(b) States	600
7. Term loans from financial institutions (net)	895
(a) Negotiated loans from LIC and the Reserve Bank of India	755
(b) Other term loans	500
(c) *less* Repayments to financial institutions	(—) 360
8. Commercial credit from banks (net)	1,185
(a) Increase in outstanding credit from banks	1,500
(b) *less* Increase in outstanding deposits with banks	(—) 315
9. Debits, deposits and miscellaneous items	1,008
(a) Loan repayments by term financing institutions	128
(b) Other receipts (net)	880
10. Absorption of coins by public (net)	81
(a) Total absorption of coins by public	100
(b) *less* Addition to cash held by treasuries and public sector undertakings	(—) 19
11. Borrowing from Reserve Bank of India against treasury bills	1,000
12. Resources of public banking and financial institutions for investment in buildings	90
13. Receipts from the rest of the world (net)	2,443
(a) From fresh inflow of funds[1]	2,243
(b) From US rupee funds	200
TOTAL	37,250

[1] Includes suppliers' credit of Rs 400 crores.

The Annual Plan for 1974-75 which was the first year of the Fifth Five Year Plan was formulated with a total outlay of Rs 4,844 crores. Its objective was to meet the pressure on the economy arising from the inflationary situation both within the country and abroad. The Plan gave special attention to core sectors like steel, power, transport and the production of coal in the context of the current oil situation. Special mention may also be made of the National Programme of Minimum Needs started in 1974-75 to provide certain basic amenities in the form of elementary education, rural health, drinking water, provision for slum clearance, rural roads and rural electrification.

The annual plan for 1975-76 envisages an outlay of Rs 5,978 crores. It reflects the basic imperative of ensuring growth with stability. In designing the growth strategy distributional considerations have

been kept in view within the overall constraints facing the economy. Fuller utilisation of capacity in sectors which can, in particular, promote exports or saving in imports, has been accorded special attention. Top priority has been given to projects capable of yielding results in the short run in preference to long term projects where meaningful choices exist. The distribution of the outlays among various sectors of development is indicated in table 13.5.

TABLE 13.5
ANNUAL PLAN (1975-76) OUTLAYS UNDER VARIOUS HEADS

(*Rs crores*)

Head of Development	Central & Centrally-sponsored schemes	States	Union Territories	Total
1. Agriculture and Allied Programmes including A.R.C.	278.56[1]	400.26	12.59	691.41
2. Irrigation & Flood Control	11.21	453.18	3.83	468.22
3. Power	119.01	966.41	16.16	1,101.58
4. Village & Small Industries	40.49	30.73	2.67	73.89
5. Industry & Minerals	1,534.19	109.35	0.48	1,644.02
6. Transport & Communication	835.08	190.43	14.93	1,040.44
7. Education	92.07	110.37[2]	11.65	184.09
8. Science & Technology	71.27	—	—	71.27
9. Health	44.09	45.80	5.26	95.15
10. Family Planning	63.20	—	—	63.20
11. Nutrition	3.95	14.95	0.46	19.36
12. Water Supply & Sanitation	1.03	123.28	13.51	137.82
13. Housing & Urban Development	34.59[3]	98.64	8.93	142.16
14. Welfare of Backward Classes	17.00	31.34	0.79	49.13
15. Social Welfare	11.00	2.38	0.40	13.78
16. Labour & Labour Welfare	1.51	4.88	0.47	6.86
17. Others	22.26	44.98[4]	3.97	71.21
18. Employment Promotion Programmes	10.00	44.50[5]	—	54.50
19. Hill and Tribal Areas	—	40.00	—	40.00
20. North Eastern Council	—	—	—	10.00
GRAND TOTAL	3,160.51	2,711.48	96.10	5,978.09

[1] Includes Rs 50 crores for ARC and excludes Rs 3.95 crores for Nutrition.
[2] Includes scientific services and research.
[3] Includes a provision of Rs 4 crores for Public Housing and Rs 6 lakhs for Dock Labour Housing.
[4] Includes other social and community services, economic services and general services, state capital projects and information and publicity.
[5] Includes Rs 4.50 crores (i.e. Rs 2.00 crores for Punjab and Rs 2.50 crores for West Bengal) for Special Employment Programmes and another Rs 40 crores for Employment Guarantee Schemes in Maharashtra to be administered through Employment Guarantee Fund.

14 AGRICULTURE

AGRICULTURE

Agriculture and allied occupations provide livelihood to about three-fourths of the population and contribute nearly one half of the national income. The number of persons engaged in agriculture alone, according to the 1971 census, was 12.57 crores—7.82 crore cultivators and 4.75 crore agricultural labourers. Agriculture not only supplies raw materials for some of the major industries such as cotton, jute textiles and sugar, but also provides a substantial proportion of the country's exports.

Land Utilization

Land utilization statistics are available for 30.56 crore hectares or 93.3 per cent of the total area of 32.80 crore hectares.

Table 14.1 gives details of land utilization in India for 1969-70, 1970-71 and 1971-72.

TABLE 14.1
LAND UTILIZATION

(*crore hectares*)

	1969-70	1970-71[1]	1971-72[1]
Total geographical area	32.80	32.80	32.80
Total reporting area for land utilization	30.61	30.53	30.56
1. Forests	6.62	6.60	6.57
2. Not available for cultivation			
(i) Area put to non-agricultural uses	1.59	1.62	1.64
(ii) Barren and uncultivable lands	3.03	2.92	2.94
TOTAL	4.62	4.54	4.58
3. Other uncultivated land excluding fallow lands			
(i) Permanent pastures and grazing lands	1.30	1.33	1.31
(ii) Land under tree crops and groves	0.44	0.44	0.44
(iii) Cultivable waste	1.58	1.61	1.59
TOTAL	3.32	3.38	3.34
4. Fallow Lands			
(i) Current fallows	1.23	1.11	1.26
(ii) Others	0.96	0.86	0.87
TOTAL	2.18	1.97	2.13
5. Net Area sown	13.87	14.04	13.94
Area sown more than once	2.47	2.47	2.46
Total cropped area	16.34	16.51	16.40

[1]Provisional.

Irrigated Area

Of the net area under cultivation, 22.2 per cent is irrigated. Between 1950-51 and 1971-72, the net irrigated area increased by 1.07 crore hectares as shown in Table 14.2.

TABLE 14.2
AREA UNDER IRRIGATION

(*crore hectares*)

Source of irrigation	1950-51	1971-72	Increase (+) or decrease (—)
Canals	0.83	1.28	+0.45
Tanks	0.36	0.41	+0.05
Wells	0.60	1.21	+0.61
Other sources	0.30	0.26	- 0.04
TOTAL	2.09	3.16	+1.07

Agricultural Census

The first country-wide agricultural census, with July 1970 to June 1971 as the reference year, was released on 24 December 1975. It was one of the biggest ventures in agricultural statistics ever launched in India and the collection of data involved over a lakh of functionaries. The census gives data on various characteristics of operational holdings in the country, including the sizes of holdings, irrigation facilities, cropping pattern, commercial versus foodgrains crops and intensity of cropping.

According to the census, there are 7.05 crore operational holdings in the country spread over an aggregate area of 16.2 crore hectares. The average size of a holding is 2.30 hectares out of which net area under cultivation is 2.06 hectares. A half of the holdings are of less than one hectare whereas 28 lakh holdings are of 10 hectares and above. The area under irrigation is 2.9 crore hectares or 21 per cent of the area under cultivation. Of the net area sown 80.4 per cent is under food crops and 19.6 per cent under non-food crops.

Principal Crops and Area

The two outstanding features of agricultural production are the wide variety of crops and the preponderance of food over non-food crops.

Table 14.3 shows the area under major crops for selected years since 1950-51.

TABLE 14.3
AREA UNDER PRINCIPAL CROPS

('000 *hectares*)

Crops	1950-51	1970-71[1]	1971-72[1]	1972-73[1]	1973-74[2]
Rice	30,810	37,592	37,758	36,688	**38,011**
Jowar	15,571	17,374	16,777	15,513	**16,964**
Bajra	9,023	12,913	11,773	11,817	**13,646**
Maize	3,159	5,852	5,668	5,838	**6.021**
Ragi	2,203	2,472	2,425	2,329	**2,392**
Small millets	4,605	4,783	4,477	4,265	**4,532**
Wheat	9,746	18,241	19,139	19,463	**19,057**
Barley	3,113	2,555	21,455	2,449	**2,624**
TOTAL CEREALS	78,230	1,01,782	1,00,472	98,362	**1,03,247**
Gram	7,570	7,839	7,912	6,967	**7,691**
Tur	2,181	2,655	2,346	2,424	**2,576**
Other pulses	9,340	12,040	11,893	11,524	**12,614**
TOTAL FOODGRAINS	97.321	1,24,316	1,22,623	1,19,277	**1,26,128**
Potatoes	240	482	492	505	**533**
Sugarcane (gur)	1,707	2,615	2,390	2,452	**2,722**
Black pepper	80	120	119	120	**122**
Chillies	592	783	753	682	**732**
Ginger	17	22	25	23	**24**
Tobacco	357	447	458	445	**447**
Groundnut	4,494	7,326	7,510	6,990	**6,900**
Castoreeds	555	439	453	426	**529**
Sesamum	2,204	2,433	2,392	2,288	**2,358**
Rapeseed and mustard	2,071	3,323	3,614	3,319	**3,428**
Linseed	1,403	1,897	2,064	1,726	**1,876**
Cotton	5,882	7,605	7,800	7,679	**7,601**
Jute	571	749	815	700	**792**
Mesta	N.A.	330	296	293	**371**
Tea	314	354	357	359	**361**
Coffee	91	135	138	146	**N.A.**
Rubber	58	203	209	213	**218**
Coconut	622	1,046	1,088	1,099	**1,100**

[1]Revised estimates [2]Final estimates N.A.—Not available

Seasons

There are three main crop seasons, namely, *kharif*, *rabi* and summer. The major *kharif* crops are rice, jowar, bajra, maize, cotton, sugarcane, sesamum and groundnut. The major *rabi* crops are wheat,

jowar, barley, gram, linseed, rapeseed and mustard. Rice, maize and groundnut are grown in summer season also.

Production

Agricultural production which recorded a substantial rise in 1970-71 registered some fall in 1971-72 owing to unfavourable weather conditions in some parts of the country. In 1972-73, the production of most of the agricultural commodities received a severe set-back on account of widespread drought in large parts of the country, shortage of fertilizers, shortfall in power supply to tube-wells and irregular water supply from canals. The production of foodgrains, which had risen to an all time record of 10.8 crore tonnes in 1970-71, declined to 10.5 crore tonnes in 1971-72 and to 9.7 crore tonnes in 1972-73. During the crop year 1973-74, agricultural production marked a sharp recovery over the previous year. The total production of foodgrains during 1973-74 rose to the level of 10.4 crore tonnes. The production of rice during 1973-74 reached an all time record level of 4.37 crore tonnes and substantial increases also occured in the production of jowar, bajra and ragi. The production of wheat, however, registered a decline of 10.8 per cent as compared to the previous year mainly due to extremely adverse weather conditions in the rabi growing season. The production of commercial crops registered substantial increases, being of the order of over 26 per cent for five major oilseeds, 24 per cent for jute, 10 per cent for sugarcane and 7 per cent for cotton as compared to the previous year.

Table 14.4 shows the production of principal crops in 1950-51, 1971-72, 1972-73 and 1973-74.

TABLE 14.4 PRODUCTION OF PRINCIPAL CROPS

('000 *tonnes*)

Crops	1950-51[1]	1971-72[2]	1972-73[3]	1973-74[3]
Rice (cleaned)	22,058	43,068	39,245	43,742
Jowar	6,250	7,722	6,968	8,992
Bajra	2,680	5,319	3,929	7,086
Maize	2,357	5,101	6,388	5,643
Ragi	1,353	2,208	1,923	2,131
Small millets	1,776	1,669	1,552	1,864
Wheat	6,822	26,410	24,735	22,072
Barley	2,518	2,577	2,379	2,327
TOTAL CEREALS	45,814	94,074	87,119	93,857
Gram	3,823	5,081	4,537	4,006
Tur	1,813	1,683	1,928	1,364
Other Pulses	3,561	4,330	3,442	4,384
TOTAL FOODGRAINS	55,011	1,05,168	97,026	1,03,611
Potatoes	1,832	4,826	4,451	4,626
Sugarcane (cane)	70,490	1,13,570	1,24,867	1,37,833
Black pepper	20	26	26	26
Chillies (dry)	358	494	412	488
Ginger (dry)	14	35	34	38
Tobacco	257	419	372	441
Groundnut (nuts in shell)	3,319	6,181	4,092	5,798
Castorseed	107	154	145	235
Sesamum	422	449	385	486
Rapeseed and mustard	768	1,433	1,808	1,692
Linseed	364	529	428	471
Cotton (lint) ('000 bales)[4]	2,870	6,564	5,417	5,819
Jute (dry fibre) ('000 bales)[4]	3,497	5,684	4,978	6,176
Mesta (dry fibre) ('000 bales)[4]	659	1,150	1,112	1,461
Tea	275[5]	435	456	472
Coffee	25[5]	69	91[6]	86[6]
Rubber	14[5]	101	112	125
Coconut (crore nuts)	358[5]	612	600	579

[1] Adjusted. [2] Revised estimates. [3] Final estimates.
[4] 180 kg each. [5] Unadjusted figures. [6] Provisional.

Plan Expenditure

The approved outlays and anticipated expenditure on various heads of development of agriculture and allied sectors during the fourth Five Year Plan and approved outlays for the Annual Plan (1974-75) are shown in Table 14.5. The tentative outlay for the Fifth Plan, also incorporated in the table, amounts to Rs 4,935 crores.

TABLE 14.5
OUTLAYS AND EXPENDITURE ON AGRICULTURAL PROGRAMMES

(*Rs crores*)

Heads of Development	Fourth Plan approved outlay	Anticipated expenditure during the Fourth Plan	Fifth Plan tentative outlay	Annual Plan (1974-75) approved outlay
I Agricultural programmes				
Agricultural research and education	85.0	112.4	245.0	34.5
Crop husbandry including land reform	420.2	334.8	762.2	98.8
Minor irrigation	515.7	526.0	800.6	106.3
Soil conservation	159.4	163.4	289.7	37.5
Command area development	38.3	44.3	216.6	26.6
Animal Husbandry and dairying	233.1	138.8	539.3	65.2
Fisheries	83.3	53.6	159.3	19.4
Forestry	92.5	90.4	222.5	26.8
Agricultural credit	324.0	185.6	426.8	70.6
Agricultural marketing, warehousing and storage	94.0	98.3	138.4	12.1
Food processing	18.6	3.7	35.0	5.6
Buffer stocks	255.0	124.0	100.0	—
Special programmes for rural development and employment	115.0	112.2	453.4	57.1
TOTAL	2,434.1	1,987.5	4,388.8	560.5
II Allied programmes				
Co-operation	178.6	249.9	418.0	62.4
Community development and panchayat	115.5	116.1	129.0	14.2
TOTAL	294.1	366.0	547.0	76.6
GRAND TOTAL	2728.2	2353.5	4935.0[1]	638.4[2]

[1] Although the total comes to Rs 4,935.8 crores, it has been taken at Rs 4,935.0 crores as given in the Fifth Plan Document (Vol. I)

[2] Although the total comes to Rs 637.1 crores, it has been taken at Rs 638.4 crores as given in the Annual Plan (1974-75) Document.

FOOD SITUATION

The food situation in the country continued to be difficult during the first nine months of 1974 but later there was some improvement. Although foodgrain production in 1973-74 marked a recovery of 66 lakh tonnes over the previous year, the actual production of 10.36 crore tonnes that year was still lower by about 50 lakh tonnes than the record level reached in 1970-71. The improvement in production in 1973-74 was in rice and coarse cereals while the wheat output suffered a decline for the second successive year. There was a perceptible shrinkage in market supplies and the upward pressure on prices continued unabated. The all-India wholesale price index for cereals rose by nearly 48 per cent between December 1973 and September 1974. However, later between September and December 1974, the cereal index declined by about 9 per cent. On the whole, the cereal index rose by 38 per cent during 1974. In order to improve the marked availability of foodgrains, particularly in the deficit states, reduce inter-state disparity in prices and relieve the pressure on public distribution

system to some extent, the wheat policy was modified so as to allow the trade to operate under a system of licensing and control. To check the rise in prices and safeguard the interests of the vulnerable sections of the population, 106 crore tonnes of foodgrains were distributed through the public distribution system. To meet increasing requirements of the public distribution system, vigorous efforts were made to maximise procurement both in the surplus and deficit states. In addition, 49 lakh tonnes of foodgrains was imported during 1974 to supplement the domestic supplies. Besides, steps were taken to check speculative hoarding and smuggling of foodgrains.

Procurement

Total procurement of foodgrains out of 1973-74 crop was about 63 lakh tonnes as against the previous year's level of about 76 lakh tonnes. Procurement of rice paddy (in terms of rice) amounted to 38.86 lakh tonnes as against 27.06 lakh tonnes in the previous season. Of this about 19.77 lakh tonnes were contributed to the central pool. Under the new policy adopted in 1974-75 wheat traders were required to give 50 per cent of the quantity procured by them as levy and the remaining quantity was allowed to be retained for sale within or outside the state on the basis of permits. Procurement of wheat by government agencies out of 1973-74 crop (during the 1974-75 marketing season) was 19.18 lakh tonnes as against 45.31 lakh tonnes in the previous season. A quantity of 13.78 lakh tonnes was retained by the whole trade for disposal through normal trade channels. Quantities delivered to the central pool totalled 14.54 lakh tonnes.

For the 1974-75 kharif season, about 33.7 lakh tonnes of rice and about 2.8 lakh tonnes of coarse grains had been procured by 21 June 1975. Besides, government also procured more than 33.9 lakh tonnes of wheat between 1 April and 25 June 1975.

The systems of procurement adopted by the state governments were: monopoly purchase-cum-compulsory procurement; graded levy on producers; levy on millers/dealers; open market purchases; and requisitioning of stocks.

Wheat Policy

As already mentioned, the Government of India evolved a new wheat policy for the 1974-75 rabi season. While procurement of wheat by the public agencies in all the states was to continue, private traders, including the cooperatives, allowed to operate, even though under a system of strict licensing and control. A 50 per cent levy was imposed on such traders purchasing wheat at the *mandi* points in the surplus states of Punjab, Haryana, Uttar Pradesh, Madhya Pradesh and Rajasthan and the traders were allowed to sell the balance levy-free stock in the open market, but they could take it outside the state only on the basis of an export permit. The procurement price of wheat was fixed at Rs 105 per quintal for all varieties and the issue price of wheat from the central pool was consequently raised to Rs 125 per quintal.

For the 1975-76 marketing season, the procurement for wheat was maintained at Rs 105 per quintal. In order to maximise procurement for the central pool a suitable bonus scheme was introduced. While retaining each state as a separate zone, the inter-state movement of wheat on trade account was stopped. The mode of procurement was left to the state governments. The issue price of wheat for stocks released from the central pool for the public distribution system was retained at the last year's level of Rs 125 per quintal.

Public Distribution

As much as 1.06 crore tonnes of foodgrains were released from the

public distribution system during 1974 to protect the interests of the vulnerable sections of the population.

Import of Foodgrains

The central government imported 48.74 lakh tonnes of foodgrains in 1974 as against 36.14 lakh tonnes in 1973. Table 14.6 shows the import of cereals into India since 1967.

TABLE 14.6 IMPORT OF CEREALS

('000 tonnes)

Cereals	1967	1970	1971	1972	1973	1974
Rice	453	206	240	131	—	—
Wheat	6,400	3,425	1,814	314	2,414	4,203
Other Cereals	1,819	—	—	—	1,200	671
TOTAL	8,672	3,631	2,054	445	3,614	4,874

Rationing

In 1974, statutory rationing of foodgrains was in force in Calcutta and Asansol-Durgapur group of industrial towns in West Bengal and in the city of Bombay in Maharashtra. Rationing in Bombay was confined only to rice and in Calcutta and Asansol-Durgapur group of towns to rice and wheat. The population covered under statutory rationing was about 1.78 crores at the end of 1974 as against 1.71 crores a year ago. Informal rationing of foodgrains continued in other areas. The total number of fair price and ration shops in the country as at the end of 1974 was about 2.13 lakhs as against 2.07 lakhs at the end of 1973.

Price Policy

Fixation of minimum support prices and procurement prices has been an essential feature of the central government's policy for the past several years. Minimum prices are in the nature of a long-term guarantee to the producers so that in the event of a glut prices are not allowed to fall below the minimum economic levels. These prices are generally announced before the start of the sowing season. In 1973-74, the minimum support prices for kharif cereals were substantially raised and fixed at levels higher than the previous year's procurement prices. Government decided not to announce the minimum support prices for kharif cereals for 1974-75 season and for wheat for 1975-76 season in view of the policy of purchasing all quantities offered for sale at procurement prices which are higher than the minimum support prices.

Procurement prices are meant essentially for the purchase of quantities needed by the government for maintaining the public distribution system and for building up buffer stocks.

The Agricultural Prices Commission, set up in 1965, advises the central government on price policy for agricultural commodities, particularly paddy and rice, wheat, jowar, bajra, maize, sugarcane, oilseeds, cotton and jute. The objective is to evolve a balanced and integrated price structure in the perspective of overall needs of the economy and the interests of producers and consumers.

Buffer Stock

To impart stability to the country's food economy, the central government had built up a stock of nearly 80 lakh tonnes of foodgrains in the beginning of 1972. Total stocks with the government rose to a peak of 88 lakh tonnes in June 1972. The increased distribution of foodgrains between 1972 and 1974, despite the increase in imports during 1973 and 1974, led to considerable depletion of stocks. Total physical stocks with the central and state governments at the end of

1974 stood at 24 lakh tonnes as against 34 lakh tonnes at the end of 1972 and 28 lakh tonnes at the end of 1973.

Food Corporation of India

The Food Corporation of India, which was set up in 1965, operates as the sole agency of the central government for procurement, import, distribution, storage, movement and sale of foodgrains. It also performs other diversified activities such as handling of fertilizers at ports, rice milling, production of nutritious processed foods and wholesale distribution of levy sugar.

The Corporation procured or purchased about 51 lakh tonnes of foodgrains out of the 1973-74 crop. At the end of 1974, it had a storage capacity of 72.86 lakh tonnes, mostly owned.

Central Warehousing Corporation

The Central Warehousing Corporation acquires and builds godowns and warehouses and uses them for the storage of agricultural produce, inputs, implements, and notified commodities offered by individuals, cooperative societies and other institutions. By the end of 1974, the storage capacity of the Corporation was 15.19 lakh tonnes, of which 11.77 lakh tonnes was owned by it, the remaining 3.42 lakh tonnes being hired capacity.

DEVELOPMENT PROGRAMMES

Under the new strategy for agricultural development adopted in 1966-67, development programmes have been revised to meet the needs of the farmer. Arrangements for the production and supply of improved seeds, particularly of the high yielding varieties have been strengthened. Efforts are being made to bring science and technology closer to the farmer. The supply of inputs and institutional credit for agricultural requirements are being constantly stepped up. Since growth with social justice is one of the important objectives of the planned development, special emphasis has been laid on programmes for the uplift of the weaker sections of rural population, particularly the small and marginal farmers and agricultural labourers. The targets and achievements of principal agricultural development programmes are dealt with briefly in the following paragraphs.

IADP

The Intensive Agricultural District Programme (IADP), popularly known as the 'package programme', was started on a pilot basis in 1961 in seven selected districts. The programme aims at combining technical know-how, credit and production supplies for stepping up agricultural production. During 1973-74, the programme was in operation in 30.1 thousand villages in 15 selected districts of the country. During 1974-75, 15 more districts—2 each in Bihar and Karnataka, 4 in Punjab and 7 in Madhya Pradesh have been covered by this approach. The operation of IADP has contributed to a significant improvement in the use of critical inputs like improved seeds, fertilizers and plant protection measures.

Multiple Cropping

The multiple cropping programme, initiated in 1967-68, aims at increasing the cropping intensity of land through better utilisation of the existing irrigation facilities as well as the development of new irrigation potential throughout the country. The coverage during the first two years was 37.4 lakh hectares and 60 lakh hectares respectively. Under the Fourth Plan a target of additional 90 lakh hectares had been fixed which has been achieved. Under the Fifth Plan, a target of about 110 lakh hectares has been envisaged so as to raise the total gross cropped area from 16.90 crore hectares in 1973-74 to 18 crore

hectares in 1978-79. The centrally-sponsored scheme of pilot-projects for multiple cropping initiated in 1971-72 has been discontinued from 1974-75. In view of the success achieved in organising pilot projects, some state governments like Karnataka, Tamil Nadu, Kerala, Rajasthan and Himachal Pradesh are continuing the scheme under the state sector.

High Yielding Varieties Programme

The cultivation of high yielding varieties since 1966-67 has resulted in substantial increase in foodgrains production. Wheat production has been more than doubled. Rice production has also increased though not as much as in the case of wheat. Bajra production has registered some increase but the progress under maize and jowar is relatively slow.

A major development in rice cultivation was the launching of the Minikit Programme from 1971-72. For optimising the yields of the available high-yielding varieties of rice, it has been found necessary to advance their sowing time. Efforts were directed to educate the farmers to raise rice nurseries in advance of the main kharif season. A special programme for timely supply of seedlings by raising community nurseries at tube-well points and on government farms was undertaken in three command areas in Bihar. This programme has given encouraging results and is being extended to Assam, UP, Madhya Pradesh, Bihar, Orissa and West Bengal during kharif 1975. As in case of rice, Minikit Programmes for wheat, maize, jowar and bajra have also been launched from 1974-75. A special scheme was undertaken this year for the replacement of rust-susceptible wheat varieties in the North Southern hill areas.

The target of coverage of 2.5 crore hectares of area under high-yielding varieties of cereals and millets under the Fourth Plan has been exceeded. The coverage was of the order of 2.6 crore hectares. The coverage in 1974-75 is estimated at around 2.7 crore hectares and the target for 1975-76 has been tentatively fixed at three crore hectares. The Fifth Plan target of coverage of the high-yielding varieties is four crore hectares.

Soil and Water Conservation

By the end of 1974-75 an area of 180 lakh hectares of agricultural land was treated with soil conservation practices. In addition 20 lakh hectares of eroded land were put under afforestation and grassland development. Water shed management in 24 major River Valley Projects has also been taken up with a view to prolonging the life of the reservoirs by reduction of sedimentation. A new Water Shed Management strategy has been adopted during the Fifth Five Year Plan, which will cover treatment of all types of land (agriculture, forest, grass land and waste land) with soil conservation measures through cover management and engineering structures. The Soil Conservation Work is also a rural employment programme which has generated 1,450 crore man-days of rural employment in the country so far.

Fertilizers

The consumption of fertilizers during 1974-75 declined by about 9 per cent compared to 1973-74. The estimated consumption of fertilizers in terms of nutrients (nitrogen, phosphates and potash) was 25.79 lakh tonnes as against 28.39 lakh tonnes in 1973-74. The consumption of nitrogenous fertilizers was 17.74 lakh tonnes, of phosphatic fertilizers 4.77 lakh tonnes and of potassic fertilizers 3.28 lakh tonnes as against 18.29 lakh tonnes, 6.50 lakh tonnes and 3.60 lakh tonnes respectively during 1973-74.

To increase the agricultural production, the Government of India has undertaken a scheme to amend the acidic and alkali soils in certain compact areas of the country during the Fifth Plan at an outlay of Rs 13 crores.

Manures

For the development and utilization of local manurial resources, schemes for urban compost, sewage and sulage utilization, rural compost and green manuring, mechanical compost plants and gobar gas plants are in operation under the state sector. Urban compost production during 1973-74 was estimated at 46 lakh tonnes. The target of production during 1974-75 was 48 lakh tonnes and the Fifth Plan target is 75 lakh tonnes.

A compost plant has been set up at Ahmadabad. It is planned to set up 27 compost plants in the country by the end of the Fifth Plan. By the end of the Fourth Plan, 17 crore tonnes of rural compost was produced. It is targeted to achieve a production of 35 crore tonnes of rural compost by the end of Fifth Plan. Area under green manuring is 60 lakh hectares. The programme will be intensified during the Fifth Plan.

The area under sewage irrigation in 1973-74 was 24,000 hectares. It is programmed to double this area.

About 10,000 gobar gas plants were set up in 1974-75. It is planned to set up 1,00,000 such plants during the Fifth Plan period.

Quality Seeds

For the supply of quality seeds there are two public sector undertakings, the National Seeds Corporation (NSC) and the State Farms Corporation (SFC). The NSC has considerably expanded seed production and processing programmes. During 1974-75 the Corporation is expected to produce 7.6 lakh quintals of certified seeds and about one lakh quintals of foundation seeds. In view of the utmost importance of timely availability of seeds to the farmers, a net-work of 950 seed dealers and 76 sale points have been established by the Corporation all over the country.

The National Seeds Corporation has taken up a scheme aimed at the maintenance of reserve stocks of seeds with financial assistance to the extent of Rs 3 crores from the Centre to meet unanticipated demand for seeds. The Corporation in collaboration with the ICAR and selected agricultural universities is taking up a project for production of breeder and foundation seeds of vegetables at an outlay of Rs 1 crore. The National Seeds Project with sub-projects in half a dozen major seed producing states is being set up with World Bank assistance for the production and distribution of certified seeds.

The State Farms Corporation of India, set up in 1969 to supplement the production and supply of quality seeds by the National Seeds Corporation, is expected to produce 21,000 tonnes of quality seeds in 1974-75. In addition to seed production and land development work on custom basis, the State Farms Corporation has also undertaken fabrication of spare parts of tractors and other machinery at Suratgarh to cater to the requirements of its farms. A canning plant set up at Mizoram commenced production during 1974-75.

The implementation of the Seeds Act, 1966 is being pursued more vigorously. Almost all the states and union territories have set up state seed sub-committees under the Act to review the progress of various seed programmes in the states. In order to regulate the quality of seeds nearly 200 varieties of different crops were notified under the Act during 1974-75. In addition, 20 new high yielding varieties

comprising eight each of wheat and sorgham, two of barley and one each of linseed and soyabean were released for general cultivation in various parts of the country.

Plant Protection

The estimated consumption of pesticides during 1974-75 was about 47,000 tonnes against the target of 45,500 tonnes. The target for 1975-76 has been fixed at 54,000 tonnes. Under the centrally sponsored Endemic Area Scheme, an area of 7.36 lakh hectares (4.53 lakh hectares by ground spraying and 2.83 lakh hectares by aerial spraying) was targeted to be covered annually during the Fifth Plan period. An area of 6.02 lakh hectares (1.97 lakh hectares by aerial spraying and 4.05 lakh hectares by ground spraying) is estimated to have been covered during 1974-75.

Agro-Industries Corporations

Agro-Industries Corporations have been set up in 17 states as state sector undertakings with share capital contribution almost equally by the Centre and the states. The Corporations are mainly engaged in the distribution of tractors and other items of agricultural machinery, setting up of machinery hiring centres and repair workshops and supply of other agricultural inputs. Lately, Agros are also planning to enter the field of city compost handling plants. One such plant is being installed by the Gujarat Agro in Ahmadabad.

Agro-Service Centres

The scheme of rehabilitating educated unemployed technical personnel to provide much needed services to the farming community in rural areas launched during the Fourth Plan is being continued in the Fifth Plan. Under this scheme, training cells have started functioning in 14 states of Punjab, Haryana, Assam, Andhra Pradesh, Karnataka, Uttar Pradesh, Madhya Pradesh, Maharashtra, Gujarat, Orissa, Rajasthan, West Bengal, Bihar and Tamil Nadu. In addition, the existing training facilities at Tractor Training and Testing Station, Budni and Tractor Training Centre, Hissar, have been supplemented to train additional entrepreneurs to set up Agro-Service Centres. By the end of March 1975, 1,915 Agro-Service Centres started functioning and 2,965 entrepreneurs completed training.

Drought Prone Area Programme

DPAP (formerly known as Rural Works Programme) was set up in 1970-71 in the non-Plan central sector. Subsequently the programme was reoriented on the basis of an area development approach and included in the central plan. For details see Chapter 15.

Dry Land Development

To promote integrated agricultural development in the dry areas of the country which are faced with the twin problems of low production and high instability, a centrally sponsored scheme of Integrated Dry Land Agricultural Development is being implemented. Under this scheme, 24 projects have been taken up in 12 states in coordination with research centres maintained by the Indian Council of Agricultural Research. The various programmes undertaken under these projects include cultivation of short duration on photosensitive high-yielding and drought resistent varieties of crops, adopting the modern dry farming technology. Incentives are given to the participating farmers in the shape of subsidies and grants. The results of demonstrations have indicated that by following the improved dry farming techniques, 50 to 100 per cent increase in the yield of various crops can be expected. The scheme is being continued in the Fifth Plan.

Farmers' Service Societies

Farmers' Service Societies are being organised in certain selected areas to provide integrated services on an experimental basis. The main objective of the societies is to help farmers, particularly small and marginal farmers, rural artisans and agricultural labourers by providing them, on an integrated basis, credit and service for increasing employment, production and income. Up to 31 March 1975, 70 such societies had been organised.

AGRICULTURAL MARKETING

The Directorate of Marketing and Inspection advises the central and state governments on agricultural marketing techniques. Its other activities include: (i) promotion of grading and standardisation of agricultural and allied commodities; (ii) statutory regulation of markets and market practices; (iii) training of personnel; (iv) market extension; (v) market research and survey; and (vi) administration of Cold Storage Order, 1964 and Meat Food Products Order, 1973.

Grading and Standardisation

The important commodities graded under 'Agmark' for internal consumption include cotton, vegetable oils, ghee, cream, butter, wheat atta, eggs, ground spices and honey.

For securing adequate return to farmers, 572 grading units at production level were functioning by the end of March 1974. A special scheme for grading of seed cotton (kapas) at producers' level was in operation in 25 centres spread over several stages. Compulsory grading and pre-shipment inspection prior to export was in force in respect of 40 commodities.

To ensure the purity and quality of products graded under 'Agmark', 17 laboratories have been set up at Alleppey, Bangalore, Bombay, Calcutta, Cochin, Guntur, Jamnagar, Kanpur, Kozhikode, Madras, Mangalore, Nagpur, Patna, Rajkot, Shibabad (Delhi), Tuticorin and Virudhunagar. The laboratory at Nagpur is the apex laboratory and acts as an appellate institution.

Regulation of Markets

Regulation of markets is done by the state governments. The Central Directorate of Marketing and Inspection, however, advises state governments in framing market legislation and its enforcement. The number of regulated markets in the country was 3,016 at the end of December 1974.

The Directorate is also implementing a scheme for providing financial assistance for the development of infrastructure facilities in the regulated markets for (i) command areas; (ii) economically backward areas; and (iii) markets handling predominantly commercial crops like jute, cotton and tobacco. Assistance amounting to Rs 31.75 lakhs was provided during 1973-74.

Training of Personnel

Personnel from different states are provided training in various fields of agricultural marketing by the Directorate of Marketing and Inspection. So far, 4,139 persons have been trained.

Market Extension

With the object of developing orderly marketing, extension work among the producers and consumers is carried out by the Directorate through various media like documentaries, cinema slides, exhibitions and printed literature.

Market Research and Survey

The Directorate carries out country-wide marketing surveys for important agricultural, horticultural and livestock commodities to

identify shortcomings of regulated markets. At present, a survey of marketable surplus and post-harvest losses of important foodgrains in the country and another survey of important agricultural and horticultural crops grown in the north-eastern region are under way.

Cold Storage Order and Meat Food Products Order

The Cold Storage Order, 1964 is enforced by the Directorate for developing scientific cold storage and minimise loss in storage. To ensure hygienic production of meat food products, the Meat Food Products Order, 1973 is being implemented.

AGRICULTURAL RESEARCH AND EDUCATION

The Department of Agricultural Research and Education, set up in December 1973, is responsible for co-ordinating research and educational activities in India in the fields of agriculture, animal husbandry and fisheries. This Department, besides giving administrative support also provides necessary governmental linkage to the Indian Council of Agricultural Research (ICAR).

ICAR

Farm research in the country is carried out by a number of public and quasi-public institutions, spearheaded by the Indian Council of Agricultural Research (ICAR). It is the apex body for formulating plans and co-ordinating agricultural and animal husbandry education and research and their application. For details, see Chapter on 'Scientific Research'.

Agricultural Education

In the field of agricultural education, ICAR performs a role similar to the University Grants Commission. Almost every state has an agricultural university. In certain states like Maharashtra and UP., ICAR is extending support to more than one agricultural university. With a view to imparting practical and skill-oriented training to farmers' sons, village unemployed youth, school drop-outs etc., Krishi Vigyan Kendras (Farm Science Centres) are being established by ICAR in different parts of the country. One such centre started functioning in Pondicherry in March 1974. Six specialised Trainers' Training Centres will be established during the Fifth Plan period in addition to the National Staff College.

The total enrolment of students for agricultural and animal sciences has gone up by about 16 times and that of agricultural universities 19 times since 1960. As on 1 May 1974, there were in all 107 institutions teaching agricultural and animal sciences. Of these, 19 are agricultural universities.

National Commission on Agriculture

A National Commission on Agriculture was set up in 1970 to examine the progress of agriculture in India and to make recommendations for its improvement and modernisation. So far it has submitted 23 interim reports on different subjects, including fertilizer distribution, seed multiplication, some aspects of agricultural research, extension and training, credit services for small and marginal farmers and agricultural labourers, reorientation of programmes for Small and Marginal Farmers and Agricultural Labourers Development Agencies, modernising irrigation system and integrated development of command areas, desert development and certain important aspects of selected export-oriented agricultural commodities, agricultural price policy and certain important aspects of marketing and prices of selected commercial crops.

LAND REFORM

The Directive Principle embodied in article 39 of the Constitution lays down that the ownership and control of the material resources of the community are to be so distributed as best to subserve the common good and prevent concentration of wealth and means of production in a few hands to the detriment of the community. The agrarian structure[1] which independent India inherited was semi-feudal in character with intermediary tenures superimposed on the farmers over substantial areas and with heavy concentration of ownership and cultivation of land. For ameliorating the conditions of small farmers and agricultural labourers, who constitute the bulk of the rural population, agrarian transformation has figured prominently in the Five Year Plan objectives and the land policy and programmes of the central and state governments.

Plan Objectives

The First Plan recognised that the pattern of land ownership and cultivation was a fundamental issue in national development and set out a broad outline of the policy to be followed by state governments. The policy elaborated in the Second Plan was two fold: (i) to remove such impediments in the way of agricultural production as arise from the character of the agrarian structure and to create conditions for evolving as speedily as possible an agrarian economy with high levels of efficiency and productivity; and (ii) to establish an egalitarian society and eliminate social inequalities. The measures recommended related to: (a) abolition of intermediary tenures; (b) tenancy reforms including regulation of rents, security of tenure and enabling the tenants to become owners; (c) ceiling on land holdings; (d) consolidation of holdings; and (e) agrarian reorganisation.

The Third Plan envisaged implementation of the policy evolved during the Second Plan and embodied in legislation on the various aspects of land reform undertaken by states in pursuance of the accepted policies.

In the Fourth Plan, suggestions were made for a reorientation of land policy, having regard to the technological developments in agriculture and social requirements of the time and for review of the provisions in the existing legislation and measures for their expeditious implementation.

In the Fifth Plan special attention has been given to the tenancy problems. The important guidelines that took shape over the successive plans were reiterated: "First, rent should not exceed one-fifth to one-fourth of the gross produce; second, all tenancies should be declared non-resumable and permanent, except in certain specified circumstances; and, third, in respect of non-resumable land, the landlord-tenant relationship should be ended by conferring ownership rights on tenants."

Under the Constitution, the main responsibility for enactment of land legislation and its implementation is that of the state governments. The land policy laid down in the Five Year Plans is in the nature of a broad common approach which each state follows keeping in view local conditions and needs.

Progress has been made in varying degrees in all the states in enacting the requisite legislation and in its implementation. There has been an appreciable advance towards the goal of 'land to the tiller'

[1] For a brief account of the genesis and growth of the agrarian problem, see Chapter XXI, India 1958.

as a result of the measures taken by state governments. However, there have been gaps in between policy and legislation as well as between legislation and implementation. To review the progress of land reform measures, to identify weaknesses and gaps in the land laws and their implementation and to review the land policy in the context of technological developments in agriculture and current social requirements, a Central Land Reforms Committee was set up in 1970 with the Union Minister of Agriculture as the chairman. There were also special conferences of Chief Ministers of all the states and union territories in November 1969, September 1970, April 1972 and July 1972. These conferences stressed the urgency of putting into effect measures for complete security of tenure for tenants and share-croppers. They also urged redistribution of land for ensuring that the benefits of the new strategy in agriculture, extension of irrigation facilities and supply of improved seeds, fertilizers, insecticides and cheaper credit reached a larger spectrum of the rural population.

Abolition of Intermediaries

The abolition of intermediary tenures like zamindaris, talukdaris, jagirs and inams, which prevailed in about 40 per cent of the area of the country before Independence, has almost been completed. About two crore farmers have become owners of land. A considerable area of cultivable wasteland and private forests belonging to intermediaries has been vested in the State. About 58 lakh hectares of land have been distributed to the landless and other categories of agriculturists. The main problems now facing the state governments are: (i) the abolition of some remnants of intermediary tenures such as religious and charitable inams which still exist in some states; (ii) bringing about uniformity in the rights of tenants who have come in direct contact with the State and rationalisation of assessment payable by them; and (iii) building up of effective land revenue and land reform agencies in the former zamindari areas.

Tenancy Reforms

Even after the abolition of intermediary tenures, tenancy continued on a considerable scale in ryotwari areas and sub-tenancies in the former zamindari areas. Measures have been taken in various states for conferment of security of tenure, fixation of fair rent and eventually for bringing the tenants into direct contact with the State[1]. The progress made in the implementation of tenancy reforms was reviewed by conferences of Chief Ministers of states and representatives of the union territories held in November 1969 and September 1970 which recommended that the right of resumption by the landowner from his tenants should be further restricted and in respect of non-resumable areas measures should be adopted for bringing the tenants into direct contact with the State.

Homestead Tenancy

Vesting of the rights of homestead tenant over the homestead has been one of the important aspects of land reform policy. In 1973 a set of guidelines was issued to all states and union territories to enact or to amend legislative measures to confer ownership right on the homestead tenants. Most of the states have taken suitable measures for this purpose.

House Sites

In extensive areas of the country house sites are provided in the village abadi (habited) areas. Under a central scheme, the union Ministry

[1] For details, see Chapter XVI, India 1971-72.

of Works and Housing allots house-sites to landless rural persons to ameliorate the economic conditions of the weaker sections of the rural society. Originally the scheme was centrally administered but, from 1 April 1974, it was transferred to the states. Under the scheme 60 lakhs house-sites were allotted in 1975.

Surplus Land

The Prime Minister's 20-Point Economic Programme lays down that implementation of agricultural land ceilings and distribution of surplus land be speeded up. Vigorous action was taken in this regard during 1975 and considerable progress was made in the mopping up of surplus land and its distribution among weaker sections after the imposition of Emergency on 25 June. According to the figures available on 9 December 1975, a total of over one lakh hectares of surplus land was taken possession of. Out of this, over 36,000 hectares were distributed among the landless.

Ceiling on Holdings

Legislation imposing limits on the land area which a person or family may hold or in future acquire, has been enacted in most of the states. These provisions have also, by and large, been brought into force and are at different stages of implementation. The provisions under these Acts relating to the level of ceiling, the unit of application of ceiling (whether the land is to be held by each individual member of the family or as aggregate area by family as a whole), transfers and exemptions vary from state to state. In the country as a whole, about 11.5 lakh hectares of agricultural land have so far been declared surplus out of which 6.3 lakh hectares have been distributed.

The programme and the progress of ceiling on holdings were reviewed at the Chief Ministers' conference in July 1972. Based on the consensus at the conference a set of guidelines was prepared and sent to the states and union territories to amend the existing ceiling law or to enact a fresh law. Almost all the states have by now amended or enacted the land ceiling laws, the exceptions being Maharashtra and Manipur. The Delhi Land Ceiling Amendment Bill is proposed to be introduced in Parliament shortly. The Punjab land ceiling law is being extended to Chandigarh. No land ceiling law

TABLE 14.7
CEILING ON HOLDINGS

State	Level of ceiling (hectares)
Andhra Pradesh	4.05 to 21.85
Assam	6.74[1]
Bihar	6.07 to 18.21
Gujarat	4.05 to 21.85
Haryana	7.25 to 21.85
Himachal Pradesh	4.05 to 12.14[2]
Jammu and Kashmir	3.68 to 7.77[3]
Karnataka	4.05 to 21.85
Kerala	4.86 to 6.07
Madhya Pradesh	4.05 to 21.85
Orissa	4.05 to 18.21
Punjab	7.00 to 21.80
Rajasthan	7.25 to 21.85[4]
Tamil Nadu	4.86 to 24.28
Tripura	4.00 to 12.00
Uttar Pradesh	7.30 to 18.25
West Bengal	5.00 to 7.00

[1] Actual area of the orchard, subject to a maximum of 2.02 hectares in excess of the ceiling, can be retained.
[2] In certain specified areas up to 28.33 hectares.
[3] Orchards in excess of the ceiling can be retained subject to an annual tax.
[4] In certain specified areas up to 70.82 hectares.

has been enacted in the states of Meghalaya and Nagaland as there is mostly community ownership of land. The level of ceiling under the new law is shown in Table 14.7.

Consolidation of Holdings

To consolidate scattered holdings of a landholder in compact blocks and restrain further fragmentation, legislative measures have been enacted in all the states, except for the Andhra area of Andhra Pradesh, Kerala and Tamil Nadu. In Gujarat, Madhya Pradesh and West Bengal, state laws provide for consolidation on a voluntary basis on application by landholders. In other states the law provides for compulsory consolidation. In Haryana and Punjab, the consolidation of holdings has been completed. Uttar Pradesh has made good progress, and some headway has been made in Maharashtra and Himachal Pradesh. By 1974, about 356 lakh hectares had been consolidated.

Evaluation

The central government have set up a Land Reforms Centre at the Gokhale Institute of Politics and Economics, Pune. Evaluation of implementation of land reform is the main work of the Centre.

ANIMAL HUSBANDRY

CATTLE DEVELOPMENT

The programmes for the development of animal husbandry and dairying aim at augmenting the supply of nutritive foods like milk, eggs and meat and helping the small and marginal farmers to diversify their economic activities.

Cross-breeding of indigenous cows with bulls of exotic dairy breeds is encouraged for augmenting milk production. Programmes for selective breeding in recognised breeding tracts and for upgrading of non-descript animals with recognised dairy breeds are being continued. To support the cross-breeding programme, about 500 exotic dairy cattle of Jersey and Friesian breeds were imported during 1974-75. Five central cattle breeding farms have been established for raising high quality bulls of Red Sindhi, Tharparkar and Jersey breeds and Murrah and Surti breeds of buffalo. One more exotic cattle breeding farm at Andesh Nagar (Uttar Pradesh) has been sanctioned.

To locate superior germplasm of important national breeds and their utilisation for improvement, a Central Herd Registration Scheme is in operation at state livestock farms and breeding tracts of milch breeds. A Central Frozen Semen Bank has been established at Hessarghatta (Bangalore) for the production of frozen semen from high quality bulls of exotic and indigenous breeds. In addition, establishment of frozen semen stations, as a centrally-sponsored programme, has also been taken up at 5 Intensive Cattle Development Project areas at Amritsar, Bangalore, Bhopal, Gurgaon and Lucknow.

Under the Intensive Cattle Development programme being implemented since 1964-65, 70 projects have been set up in different parts of the country. Another important cattle development scheme is the key village scheme. At present, there are 640 key village blocks.

Fodder Development

The central government has established seven regional stations in different agro-climatic conditions in the country for fodder production and demonstration. These fodder stations provide in-service training as well as training to farmers. They also hold 'field days' during different crop seasons for popularising the production of nutritive

green fodders to meet the needs of exotic cross-bred and indigenous milch animals. Two large fodder seed production farms are being set up with assistance from Australia.

SHEEP DEVELOPMENT

The central sheep breeding farm set up at Hissar with Australian assistance for Corriedale breed of sheep has a flock strength of 3,500 Corriedale sheep. Corriedale rams are supplied to various states, to Haryana Agricultural University and to Indian Veterinary Research Institute, Izzatnagar, for breeding trials. During 1974-75, Australia supplied 1950 Corriedale ewes and 50 Corriedale rams. Short-term training courses for state sheep husbandry officers and a sheep shearing training course are being organised since 1972-73.

Under a centrally-sponsored scheme, establishment of five large sheep breeding farms one each in Andhra Pradesh, Jammu and Kashmir, Karnataka, Rajasthan and Uttar Pradesh were started under the Fourth Plan. These farms will be fully established during the Fifth Plan. Sites for two more farms have been selected, one in Bihar and the other in Madhya Pradesh.

In order to produce exotic germplasm for sheep improvement work in the states, 1,302 Merino sheep from USSR were imported during 1974-75.

POULTRY DEVELOPMENT

Poultry development programmes are continuing both in the public and private sectors. The estimated production of eggs in 1973-74 totalled 770 crores as against the Fourth Plan target of 800 crores. The poultry industry has made a major breakthrough in attaining self-sufficiency in respect of genetically superior chicks. The three central poultry breeding farms distributed 3.76 lakh chicks for breeding purposes to the state and private poultry farms during 1974-75. Intensification of the scientific poultry breeding programme at government farms has enabled the production of strain crosses which have given performance comparable to, and in many cases better than, the exotic hybrids available in the country.

PIGGERY DEVELOPMENT

All the eight modern bacon factories and pork processing plants established during the Third and Fourth Plan periods have been increasingly utilising their capacity for production of pork and pork products. Some of these factories have diversified their products and are handling different types of meat in addition to pork and pork products.

The regional pig breeding stations supply pure breeding stocks of exotic pigs to the farmers for further multiplication and the surplus stock for slaughter in bacon factories. The model piggery at Gannavaram (Andhra Pradesh) is supplying piggery stock of exotic pigs to other states, universities and institutions for taking up pig breeding programme.

Efforts are being made to import pigs from abroad to introduce economic production units in the existing breeding stock. Special efforts are being made to take up piggery programme in the north eastern states.

Modernisation of Slaughter Houses

For the establishment of modern slaughter houses in the country, five Corporations have been set up, namely, Modern Meat Complex Ltd, Panaji (Goa), Animal Food Corporation Private Ltd. (Bangalore), Modern Slaughter Houses Development Corporation (Hyderabad), West Bengal Livestock Processing Corporation Ltd., and Tamil

Nadu Meat Industries Corporation. The Modern Abattoir set up at Deonar (Bombay) is running satisfactorily to its capacity and provides clean and wholesome meat and also caters to the needs of export market in respect of buffalo meat.

Animal Health

During the year 1974-75, mass vaccination of susceptible animals was carried out by the field staff of the state animal husbandry departments in various parts of the country. As a result, the incidence of rinderpest has been considerably reduced. As on 1 April 1975 there were 149 check posts, 33 vaccination stations and 60 vigilance units in position. Progress has been made in regard to the project for the establishment of animal quarantine stations at Delhi, Madras, Bombay and Calcutta.

Special Programmes

In the Fifth Plan, it is intended to develop animal husbandry as an important economic subsidiary occupation for the small and marginal farmers and agricultural labourers. It is proposed to give assistance to these categories of people in compact areas in an integrated manner for rearing cross-bred heifers and for raising poultry, sheep and pigs, in accordance with the recommendations of the National Commission on Agriculture.

DAIRY AND MILK SUPPLY

Owing to drought conditions in most of the states and large scale diversion of milk for manufacturing milk products like baby food, milk powder and ghee, the average daily output of milk of all dairy plants during 1974 was 27.30 lakh litres as against 28.8 lakh litres during the previous year. The number of dairy plants in operation increased from 141 units in the previous year to 147 units in 1974, comprising 81 liquid milk plants, 16 factories for milk products and 50 pilot milk schemes and rural dairy centres.

FISHERIES

Development of fisheries has been assigned a high priority under the Fifth Five Year Plan in view of its vast potential for raising the nutritional levels of protein deficient Indian diet and as an earner of much needed foreign exchange. The Fifth Five Year Plan aims at achieving a production level of 21.69 lakh tonnes of fish which would earn to the country foreign exchange worth Rs 150 crores through export of marine products by 1978-79.

Production

Fish production in the country has sustained the upward trend. In 1973-74 total production was 19.58 lakh tonnes, of which marine fish accounted for 12.10 lakh tonnes. During 1974-75, total production is expected to increase to the level of 20 lakh tonnes.

Export and Import

The exports of marine products have been registering very significant increases. During 1973-74, exports reached an all-time record of 52,300 tonnes valued at Rs 89.51 crores, 50 per cent more than in previous year. However, in 1974-75 there was a setback. This was due to the lower demand and lesser unit value realisation of some varieties.

Under the Balanced Trade and Payment Arrangements with Bangladesh, fish of the value of Rs 2.9 crores was imported till the end of December 1974 against the target of Rs 3.5 crores.

Marine Fishing

At the end of 1973-74 there were 10,580 mechanised fish boats in operation in the country. During the Fifth Plan as many as 4750 mechanised boats are expected to be introduced.

In order to give a fillip to deep sea fishing, it is proposed to introduce 200 deep-sea fishing vessels during the Fifth Plan. Arrangements for the import of 50 vessels are being made. Proposals for encouraging construction of fishing trawlers indigenously are also under consideration.

Fishing Harbours

To stimulate deep-sea fishing, infra-structural facilities are being provided at various major and minor ports. Work is in progress on the construction of fishing harbours at the major ports of Madras Roychowk, Visakhapatnam and Cochin. A fishing harbour is to come up at Calcutta also. In addition, fishing harbours capable of handling large-sized fishing vessels are nearing completion at Karwar, Port Blair, Tuticorin and Vizhinjam. Work is in progress at Hornavar and a deep sea fishing harbour at Malpa and self-contained fishing harbours at Dharma (Orissa) and Malipatnam (Tamil Nadu) have been sanctioned. Minor landing and berthing facilities have been sanctioned at five centres. Apart from these projects, landing and berthing facilities on a limited scale have been provided at 70 sites.

Exploration of Marine Resources

The Exploratory Fisheries Project (formerly known as Deep Sea Fishing Station), Bombay, has now 11 bases under its control. A new base at Paradeep started functioning during the year 1974-75 and arrangements are under way for setting up a base at Veraval.

The project carried out exploratory and experimental fishing in offshore and deep sea waters area adjacent to the country with a view to assessing the potentialities, locating fishing grounds and developing suitable fishing gear and craft. Surveys have been completed up to a depth of 25 fathoms depth along most of the coast line. The results of the survey are being made available to the industry.

The UNDP-assisted Pelagic Fishery Project is engaged in resources surveys off the west-coast of India for the last four years. Significant results have been achieved by the Project during the year and it is estimated that the resources of sardine, mackeral and white bait off the south-west coast amount to 4.5 and 6 lakh tonnes respectively. The resources of shallow water mix (silver bellies, caraneids and butter fish) in the area have been estimated at one lakh tonnes.

Integrated Fisheries Project, Cochin

The important programmes under the Integrated Fisheries Project, Cochin, include (i) exploratory and experimental fishing (ii) training of personnel for the fishing industry and (iii) introduction and marketing of diversified fish products through fish stalls. For undertaking experimental fishing the project has a well-equipped fleet of 13 vessels of different types and sizes.

Inland Fisheries

There are four Fish Farmers' Development Agencies in Raipur (Madhya Pradesh), Mysore (Karnataka), Champaran (Bihar) and Burdwan (West Bengal) for popularising fish culture. These agencies have by and large completed preliminary work relating to training of fish farmers, selection of water areas etc. and it is expected that fish culture will be undertaken as soon as requisite improvements have been made in the selected water areas. A Fish Farmers' Development Agency in Kamrup (Assam) has been sanctioned.

Fish Marketing Processing and Preservation

During 1974-75, 11 refrigerated rail vans continued to operate on trunk routes for the movement of fish within the country. Construction work at two large ice plant-cum-cold storages in Kerala and two

ice plants and one cold storage in Tamil Nadu was in progress. Several agencies, notably UNDP and World Bank have shown interest in the cold chain scheme. Government of India have decided to acquire the Howrah Cold Storage and also sites for putting up integrated refrigeration plants at Delhi, Bangalore, Veraval and Cochin.

Training

Training facilities are available at the Central Institute of Fisheries Education, Bombay, Central Institute of Fisheries Operatives, Cochin, Inland Fisheries Training Unit, Barrackpore, and the Regional Training Centre for Inland Fishery Operatives, Agra. A centre for training extension workers in fishery culture started functioning at Hyderabad in 1974.

FORESTRY

Forests in India occupy an area of about 746 lakh hectares and account for 22.7 per cent of the total geographical area. The percentage of forest area in the country is rather low as compared to most of the countries of the world. The National Forest Policy, revised in 1952, lays down that the area under forests be steadily raised to 33.3 per cent of the total geographical area, the proportion being 60 per cent in the Himalayas, Deccan and other mountainous tracts and 20 per cent in the plains. With the growth in population, urbanization and demands for agricultural land, there has been a shrinkage of forest area. Any increase in area under forests is more than offset by the utilization of forest areas for river valley projects, rehabilitation of displaced persons, extension of area under plantations of commercial and food crops and establishment of industries and townships. Considerable improvement has, however, been brought about by scientific management over large areas mostly state-owned.

Table 14.8 shows the classification of area under forests in 1971-72 and 1972-73.

TABLE 14.8
AREA UNDER FORESTS

(lakh hectares)

Description	1971-72[1]	1972-73[1]
1. *From point of view of exploitation*		
(a) Exploitable (forests in use)	459	460
(b) Potentially exploitable	160	159
(c) Others	126	126
TOTAL	745	745
2. *By Ownership*		
(a) State	707	707
(b) Corporate bodies	23	23
(c) Private individuals	15	15
TOTAL	745	745
3. *By Legal status*		
(a) Reserved	384	384
(b) Protected	279	280
(c) Unclassed	82	81
TOTAL	745	745
4. *By Composition*		
(a) Coniferous	43	42
(b) Non-coniferous	702	703
TOTAL	745	745

[1] Provisional.

Production

Annual recorded production of industrial and fuel wood (including wood for charcoal) separately for coniferous and non-coniferous species together with royalty received by the state forest departments during 1971-72 and 1972-73 is indicated in Table 14.9.

TABLE 14.9
PRODUCTION OF INDUSTRIAL AND FUELWOOD

	1971-72[1]		1972-73[1]	
	Quantity (lakh cub. metres)	Royalty receipt[2] (Rs crores)	Quantity (lakh cub. metres)	Royalty receipt[2] (Rs crores)
1. *Industrial wood*				
(i) Coniferous	12		13	
(ii) Non-coniferous	84		84	
TOTAL	96		97	
2. *Fuelwood (including wood for charcoal)*		101.57		111.58
(i) Coniferous	4		4	
(ii) Non-coniferous	156		157	
TOTAL	160		161	

[1] Provisional.
[2] Actual market value of the forest products is . considerably higher than the royalty received by the state governments.

Minor Products

Minor forest products of major importance are bamboo, canes, kendu leaves, grasses, essential oils, medicinal plants, lac, resins, fatty oils and fats, gums, tanning materials, dyes, animal products like honey, ivory and beewax. Quite a number of these are used as raw materials for large industries while some are valuable foreign exchange earners.

Table 14.10 gives the royalty received by the state forest departments for all minor forest products during 1971-72 and 1972-73.

TABLE 14.10
MINOR FOREST PRODUCTS AND ROYALTY

(*Rs crores*)

Year	Bamboos	Other minor forest products	Total
1971-72[1]	4.40	45.79	50.19
1972-73[1]	5.11	51.47	56.58

[1] Provisional.

Forestry Development

The National Forest Policy document of 1952 governs the management and development of forest resources. The main objectives of the forestry development plan are: (i) nationalisation of forestry operations; (ii) protection and management of wild life and environmental and social forestry; and (iii) commercialisation of industrial forestry operation. A programme of man-made forestry through institutional financing by setting up forest development co-operatives is being launched to achieve a substantial rise in the production of industrial wood. Measures to augment fuel wood resources and small wood for farmers through social forestry schemes have also been initiated. These programmes are expected to increase considerably the present area of 24 lakh hectares of man-made forests. The projected requirement of industrial wood by 1980 is placed at 255 lakh cubic metres. Other important central sector schemes in operation include forest research, pre-investment survey of forest resources and logging training centre project.

Pre-investment Survey of Forest Resources

Pre-investment survey (PIS) of forest resources was originally organised in 1965 as a joint Government of India and FAO project for the survey of forest resources. Since 1969, it is a central government project

carrying out inventory work, data processing and demand and market studies. So far an area of 1,87,000 sq. km. has been surveyed and availability of resources assessed. On the basis of the findings of the PIS, the setting up of a newsprint mill in Kerala is under active consideration.

Logging Training Centre

The centre was set up in 1965 at Dehra Dun as a joint Government of India and FAO project to train forest officers and field executives of state governments. Since 1969, it is being run as a Government of India project. Since its inception, the project has trained about 2,000 persons in various aspects of modern logging methodologies.

Forest Research

The Forest Research Institute at Dehra Dun is the main centre for research in forestry and forest products and for imparting forestry education. State forest departments have also organisations for silvicultural research. The Institute has three regional centres at Bangalore, Coimbatore and Jabalpur. One more centre at Gauhati is likely to be set up soon. Training for forest rangers is imparted at Coimbatore, Dehra Dun and Kurseong.

Central Forestry Commission

A Central Forestry Commission with the Inspector-General of Forests as its chairman was set up in 1965 for effecting technical co-ordination and collection and dissemination of information on forestry. The Commission also acts as a technical sub-committee servicing the Central Board of Forestry.

IRRIGATION

The vulnerability of India's agriculture owing to the vagaries of the monsoon has made it imperative to accord irrigation a high place in the national development plans. About 690 major and medium projects were taken up after Independence of which 421 have been completed and many others have started yielding partial benefits. The irrigation potential has more than doubled since the beginning of the First Plan. The total irrigated area in the country, which was about 2.26 crore hectares in 1950-51, rose to about 4.40 crore hectares in 1974-75. The total cropped area at the end of 1973-74 was about 16.90 crore hectares.

Water Potential

A broad assessment of the water resources of the country by different agencies places the total average annual surface run-off as varying from 1,67,300 crore cubic metres to 1,88,100 crore cubic metres and the approximate annual groundwater recharge as 42,400 crore cubic metres. The utilisable surface and groundwater resources were assessed by the Irrigation Commission in 1972 as 87,000 crore cubic metres. Against this, the utilisation rose from about 17,250 crore cubic metres in 1950-51 to about 34,300 crore cubic metres by March 1975.

With the possibilities of diverting the normal flow of rivers into irrigation canals having been almost exhausted, effort is now directed at impounding by dams the surplus river flows during the monsoon for use in dry weather and the development of groundwater in minor irrigation programmes.

Growth and Utilisation of Irrigation Potential

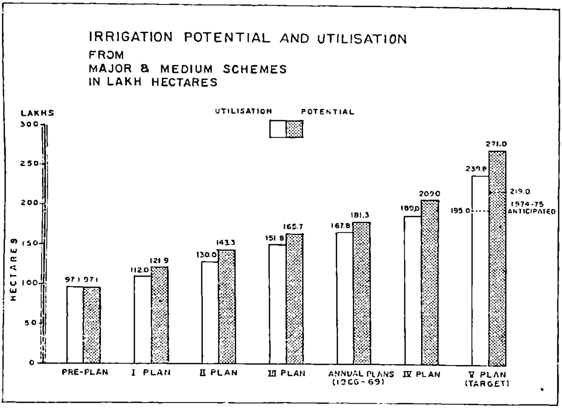
In 1951, the irrigated area from major and medium projects was 97 lakh hectares. By 31 March 1975, 421 out of a total of 690 major and medium projects taken up since 1951 had been completed and an

additional potential of 1.2 crore hectares was estimated to have been created. Table 14.11 shows the growth of irrigation potential and the corresponding utilisation from major and medium projects since the advent of planning.

TABLE 14.11
GROWTH OF IRRIGATION
(Major and Medium Projects)

(lakh hectares)

	Additional potential at the end of				
	1st Plan	2nd Plan	3rd Plan	4th Plan	5th Plan (anticipated)
Potential	25	46	69	112	174
Utilisation	15	33	55	91	143



Investment during the Plans

The total investment on major and medium irrigation projects between 1951-52 and 1974-75 was Rs 3,400 crores and on flood control and drainage works Rs 394 crores. The outlay for 1975-76 is Rs 424 crores and Rs 48.5 crores respectively. The proposed Fifth Plan outlay for major and medium irrigation projects is Rs 2,401 crores and that for flood control Rs 281 crores.

Minor Irrigation

Minor irrigation works continued to play a key role in augmenting agricultural production. Special steps were taken during 1974-75 to make available electric power and diesel supply for irrigation pumpsets on priority basis. During 1974-75, against an approved public sector outlay of about Rs 100 crores, the expenditure is estimated at Rs 105 crores. The institutional investment is estimated at Rs 150 crores. The approved public-outlay for 1975-76 is about Rs 107 crores.

About 7 lakh hectares of additional irrigation potential is estimated to have been created by minor irrigation works raising the total

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irrigation contribution from 2.35 crore hectares to 2.42 crore hectares by the end of 1974-75. It is proposed to bring an additional area of 8 lakh hectares under irrigation during 1975-76.

The Central Ground Water Board carried out ground water surveys by way of hydro-geological investigations, ground water exploration and first approximation resources evaluation studies, short-term investigations and other special studies. During 1974-75, the Board covered an area of about 60,000 sq. km by ground water surveys and undertook the drilling of 115 exploratory boreholes, 176 observation wells, 13 slim holes and 64 deposit wells. In addition, six projects were under implementation for the quantitative assessment of the ground water resources in semi-arid areas. In 1975-76, 83,200 sq. km of area is to be covered by ground water surveys and nearly 400 tubewells are proposed to be drilled.

Irrigation and Multi-purpose Projects

Some of the major irrigation and multi-purpose projects are described briefly in the following paragraphs.

Nagarjunasagar (Andhra Pradesh)

The Nagarjunasagar project comprises the construction of a 1,450-metre long masonry dam with 3,414-metre long earthern flanks on the Krishna river near Nandikonda village, about 144 km from Hyderabad and two canals, one on each side of the river. The 204-km long right bank canal and the 179-km long left bank canal will together irrigate 8.3 lakh hectares. The dam has been completed and work on the canals is under way. An irrigation potential of 4.33 lakh hectares out of a total potential of 8.32 lakh hectares had been created by 1974-75.

Tungabhadra (Andhra Pradesh and Karnataka)

A joint project of Andhra Pradesh and Karnataka, the Tungabhadra project comprising a 2,441-metre long and 49.33- metre high dam on the Tungabhadra river, was completed in 1956. Work on the canals and distribution system has also been largely completed. A total irrigation potential of 3.32 lakh hectares had been created by the end of 1973-74.

Pochampad (Andhra Pradesh)

The Pochampad project in Andhra Pradesh envisages construction of an 812-metre long and 43-metre high masonry dam with earthen flanks across the river Godavari. There will be a 113-km long right bank canal to irrigate an area of 2.3 lakh hectares. Work on the dam and the canal is in progress. An irrigation potential of 62,000 hectares had been created by 1974-75.

Gandak (Bihar and Uttar Pradesh)

Bihar and Uttar Pradesh are the participating states in the project and Nepal, under an agreement signed with India in 1959, also derives irrigation and power benefits from it. The irrigation potential of the project is 15.12 lakh hectares.

The 740-metre long barrage and appurtenant works were completed in 1969-70. The main western canal was opened in December 1972. Partial irrigation has commenced from the main eastern canal. The Nepal eastern canal was inaugurated in 1973. The project is to be completed during the Sixth Plan. An irrigation potential of 6.78 lakh hectares had been created by 1974-75.

Kosi (Bihar)

The multi-purpose Kosi project in Bihar envisages irrigation, flood control and power benefits. An agreement on the project was signed between India and Nepal in 1954 and revised in 1966. The irrigation

potential of the project is 4.34 lakh hectares. Flood embankments under the project were completed in 1959.

The barrage near Hanumannagar in Nepal was inaugurated in 1965. The eastern Kosi canal system is practically complete except for the distribution system and drainage.

Four more schemes have been sanctioned under the second stage of the project. They are: a 20 mw power house, the western Kosi canal, the Rajpur canal and extension of the flood embankments.

The western Kosi canal project provides for the construction of a 112.65-km long main canal taking off on the right bank of the Kosi barrage at Hanumannagar. The first 35.2 km of the main canal lies in Nepal. The project, after completion, would irrigate 3.14 lakh hectares. The Rajpur canal scheme envisaging construction of a branch canal of the eastern main canal will irrigate an area of 1.25 lakh hectares. Out of an ultimate irrigation potential of 7.48 lakh hectares, potential of 3.03 lakh hectares had been created by the end of 1974-75.

Kakrapara (Gujarat)

The Kakrapara project in Gujarat is the first phase of the development of the Tapi valley. A 621-metre long and 14-metre high weir near Kakrapara in Surat district was completed in 1953. Most of the earthwork on the canals and distributaries has been completed. An irrigation potential of 2.13 lakh hectares out of an ultimate potential of 2.28 lakh hectares had been created till the end of March 1975.

Ukai (Gujarat)

The Ukai multi-purpose project in Gujarat consists of a 4,928-metre long and 68.6-metre high dam across Tapi river near the village Ukai. The project will irrigate 1.56 lakh hectares and generate 300 mw of power. An irrigation potential of 72,000 hectares out of the ultimate potential of 1.58 lakh hectares had been created by the end of 1974-75.

Mahi (Gujarat)

The Mahi project in Gujarat comprises two stages. Stage I consists of a 796-metre long and 20.6-metre high masonry pick-up weir across the Mahi river near Wanakbori village. A 74-km long canal takes off on the right side to irrigate a total area of 1.86 lakh hectares. An irrigation potential of 1.48 lakh hectares had been created by 1974-75.

Stage II envisages construction of a 1,430-metre long and 58-metre high composite dam across the river Mahi near Kadana to irrigate an area of 90,000 hectares as well as additional area under Stage I.

Bhadra (Karnataka)

The Bhadra multi-purpose project across the river Bhadra in Karnataka is nearly complete. It will irrigate about one lakh hectares of land and generate 33 mw of power. An irrigation potential of 97,000 hectares had been created by 1974-75.

Upper Krishna (Karnataka)

The Upper Krishna project in Karnataka consists of the Narayanpur dam across the Krishna river with a canal taking off from the left bank and the construction of a dam at Ammatti. It will irrigate about 4 lakh hectares in the first stage.

Ghataprabha (Karnataka)

The Ghataprabha Valley development scheme envisages harnessing of water of the river Ghataprabha for irrigation in Belgaum and Bijapur districts of Karnataka. It is proposed to be implemented in three stages. So far two stages have been approved and are under execution. Stage I of the project envisages a masonry weir, 2,085

metres long and 9 metres high across the river Ghataprabha at Dhupdal, with a left bank canal 71 km long. It is practically completed except for the distribution system which is in progress. Stage II envisages construction of a composite dam, 5,275 metres long and 50 metres high at Hidkal and extension of Ghataprabha left bank canal from 71 km to 114 km. The works under stage II are in an advanced stage. Out of an ultimate potential of 1.2 lakh hectares, potential of 1 lakh hectare had been developed till the end of 1974-75.

Malaprabha (Karnataka)

The Malaprabha project, a 164-metre long and 43.4-metre high masonry dam will be constructed across the Malaprabha in Belgaum district of Karnataka. It will irrigate 2.07 lakh hectares of land. Out of this, a potential of 54,000 hectares was created by March 1975.

Tawa (Madhya Pradesh)

The Tawa project envisages the construction of a reservoir across the Tawa river, a tributary of the Narmada, in Hoshangabad district (Madhya Pradesh). The 1,630-metre long dam will be earth-*cum*-masonry type. On completion, the project will irrigate about 3.32 lakh hectares. Advance irrigation from the scheme was started in November 1974 and an area of about 1,100 hectares was irrigated during *rabi* season of 1974-75.

Chambal (Madhya Pradesh and Rajasthan)

The Chambal project is being jointly executed by Madhya Pradesh and Rajasthan. In the first stage, the Gandhi Sagar dam and its 115 mw power station, and the Kota barrage were completed. The Rana Pratap Sagar dam with a power house of 172 mw capacity was constructed in the second stage. The third stage comprises the construction of the Jawahar Sagar dam and a 99 mw power station. With the completion of all the three stages, the project will generate 386 mw of power. Out of the ultimate irrigation potential of 4.98 lakh hectares, a potential of 4.47 lakh hectares had been created by the end of 1974-75.

Bhima (Maharashtra)

The Bhima project envisages construction of two dams, one on the Pawana river near Phagne in Pune district and the other across the Krishna river near Ujjani in Sholapur district. The Pawana dam will be 1,700 metre long and 43 metre high. The Ujjani dam will be 2,600 metre long and 51.8 metre high. The 160-km long main canal will take off from the left bank. The project will have an irrigation potential of 1.74 lakh hectares. Out of this, 6,000 hectares had been covered by the end of 1974-75.

Jayakwadi (Maharashtra)

The Jayakwadi project envisages the construction of a 37-metre high earthen dam with a masonry spillway across the river Godavari in Maharashtra in the first stage. A 185-km long canal will take off from the left side to irrigate an area of 1.42 lakh hectares. By 1974-75, 24,000 hectares of potential area had been created.

Hirakud (Orissa)

The 4,801.2-metre long main Hirakud dam in Orissa, the world's longest, impounds 810 crore cubic metres of the Mahanadi waters. The project irrigates 2.50 lakh hectares out of the irrigation potential of 2.54 lakh hectares by the end of 1973-74. Its present installed power generation capacity is 270.2 mw.

Mahanadi Delta Scheme (Orissa)

The Mahanadi delta irrigation scheme, also in Orissa, is being executed to make use of the releases from the Hirakud reservoir. On completion, it will irrigate 6.84 lakh hectares. Out of this, an irrigation

potential of 4.59 lakh hectares had been created till the end of 1974-75.

Bhakra Nangal (Punjab, Haryana and Rajasthan)

A joint venture of Haryana, Punjab and Rajasthan, the Bhakra Nangal project is India's biggest multi-purpose river valley scheme so far, completed at a cost of Rs 236 crores. It consists of a straight gravity dam, 518-metre long and 226-metre high, across the Sutlej at Bhakra, the 29-metre high Nangal dam, the 64-km long Nangal hydel channel, two power houses at Bhakra dam, two more power stations on the hydel channel at Ganguwal and Kotla with a total installed capacity of 1,204 mw, about 1,100 km of canals and about 3,400 km of distributaries. The Bhakra dam impounds 7.8 lakh hectare metres of water. The canal system of the project is now irrigating 14.6 lakh hectares.

Beas (Punjab, Haryana and Rajasthan)

The Beas project, another joint venture of Haryana, Punjab and Rajasthan, consists of the Beas-Sutlej Link and the Beas dam at Pong and will cost Rs 550 crores.

The Link is principally a power project with an initial capacity of 660 mw with provision for adding another 330 mw. The 116-metre high earth-*cum*-gravel Pong dam is mainly an irrigation project with a storage capacity of 6.9 lakh hectare metres. The dam was completed in 1974. The Pong dam will also have a power house with an installed capacity of 240 mw.

Rajasthan Canal (Rajasthan)

The Rajasthan canal project will provide irrigation facilities to the north-western region of Rajasthan which is part of the Thar desert.

The project, which will use waters from Pong dam, consists of the 215-km long Rajasthan feeder canal (with the first 178 km in Punjab and Haryana and the remaining 37 km in Rajasthan) and the 467-km long Rajasthan main canal lying entirely in Rajasthan.

The first stage of the project consists of the construction of the feeder canal in full and 195 km of the main canal. The feeder canal has been completed and the main canal up to 143 km.

The second stage covers the construction of the remaining 272 km of the main canal. The project will ultimately irrigate about 12.65 lakh hectares. An area of 2.52 lakh hectares was brought under irrigation in 1974-75.

Parambikulam Aliyar (Tamil Nadu and Kerala)

This joint venture of Tamil Nadu and Kerala envisages the integrated harnessing of eight rivers, six in the Annamalai Hills and two in the plains. The scheme will irrigate about one lakh hectares and also have an installed power generating capacity of 185 mw. The ultimate irrigation potential is 1.02 lakh hectares, out of which a potential of 88,000 hectares had been created up to the end of 1974-75.

Sarda Sahayak (Uttar Pradesh)

Sarda Sahayak Project envisages construction of (i) a 1,003-metre long barrage across the river Ghagra, (ii) a link channel of 28 km length, (iii) a 811-metre long barrage across the river Sarda, (iv) a feeder channel of 260 km length involving construction of two major aqueducts over Gomti and Sai and (v) re-modelling of 6,450 km of distribution system and construction of 2,570 km of new channels. The works are being executed in five stages. Stage-I has been practically completed and commissioned.

Out of an ultimate potential of 16 lakh hectares, 1.3 lakh hectares' potential had been created by the end of 1974-75.

Ramganga (Uttar Pradesh)

The Ramganga, a major tributary of the Ganga in Uttar Pradesh, is being tamed with a 625-metre long and 125.6-metre high earth and rock-fill dam and a 72-metre high saddle dam in the Garhwal district. The project will irrigate 5.75 lakh hectares, have an installed power capacity of 198 mw, supply 200 cusecs of water for the Delhi water supply scheme and reduce the intensity of floods in central and western Uttar Pradesh. The project is nearing completion; the dam was completed in June 1974. An irrigation potential of 2.7 lakh hectares had been created by the end of 1974-75.

Farakka (West Bengal)

The Farakka project in West Bengal was taken up for the preservation and maintenance of Calcutta port and for improving the navigability of the Hooghly. It consists of a barrage across the Ganga at Farakka, a barrage at Jangipur across the Bhagirathi, a 39-km long feeder canal, taking off from the right bank of the Ganga at Farakka and tailing into the Bhagirathi below the Jangipur barrage and a road-*cum*-rail bridge over the Farakka Barrage.

Construction work was started in 1963-64; the two barrages and the road-*cum*-rail bridge have been completed. Following the Indo-Bangladesh agreement of 18 April 1975, the feeder canal started running on 21 April 1975. Work on the navigation structures is in progress.

Mayurakshi (West Bengal)

The Mayurakshi project in West Bengal comprises the Canada dam, 640-metre long and 47.24-metre high, and irrigates about 2.5 lakh hectares of land. The hydro-electric plant produces four megawatts of power. Out of an ultimate irrigation potential of 2.47 lakh hectares, potential of 2.40 lakh hectares had been created till the end of 1974-75.

Kangsabati (West Bengal)

The Kangsabati project in West Bengal envisages the construction of earthen dams, connected together by intermediate dykes, on the Kangsabati and Kumari rivers. Its canal system would cross the Silabati, Bhairoh Banki and Terafeni rivers, on which three pick-up barrages will be constructed. The project will benefit an area of 4.02 lakh hectares. A potential of 2.36 lakh hectares had been created by 1974-75.

Damodar Valley Project (West Bengal and Bihar)

The Damodar valley project was conceived for the unified development of irrigation, flood control and power generation in West Bengal and Bihar. The project is administered by the Damodar Valley Corporation (DVC), established in 1948. The DVC has completed multi-purpose dams at Tilaiya, Konar, Maithon and Panchet, hydel power stations at Tilaiya, Maithon and Panchet, a 692-metre long and 11.58 metre high barrage at Durgapur, 2,495 km of irrigation canals and three thermal power houses at Bokaro, Chandrapura and Durgapur. The irrigation potential of the project is about 3.7 lakh hectares and its installed power generating capacity is 1,181 mw, made up of 1,077 mw of thermal and 104 mw of hydel power. An irrigation potential of 3.51 lakh hectares had been created by the end of 1974-75.

FLOOD CONTROL

The flood-prone area in the country has been assessed at about two crore hectares. To save this area from the ravages of floods, the National Flood Control Programme was launched in 1954. In the first two years, the programme was devoted mainly to intensive investigations, collection of data and execution of some emergent works.

Since 1956, flood control and anti-waterlogging measures have been taken up. Flood forecasting and warning centres have been set up in some of the highly flood-prone river basins.

Flood Control Bodies

Flood Control Boards lay down policies at the state level and River Commissions (Floods) co-ordinate implementation at the inter-state level. At the national level, the Central Flood Control Board co-ordinates the work of the state boards and the River Commissions.

Because of the complexity and magnitude of the flood problem in the Brahmaputra valley and north Bengal rivers, flood control commissions have been set up by the Governments of Assam and West Bengal for implementing a comprehensive plan of flood control. The Government of India have constituted the Brahmaputra Flood Control Board and the North Bengal Flood Control Board to lay down policies, approve schemes and fix priorities. The Ganga Flood Control Board and the Ganga Flood Control Commission have also been constituted by the central government to prepare a comprehensive flood control plan for the Ganga basin and co-ordinate its implementation by the concerned states.

Progress

Since the commencement of the National Flood Control Programme in 1954, 7,880 km of embankments, 1,34,00 km of drainage channels and 215 town protection schemes had been completed by 31 March 1975. About 4,700 villages had been raised above the high flood level. This programme has cost Rs 394 crores and benefited an area of 80 lakh hectares. Eight flood forecasting centres at Bhubaneswar, Delhi, Gauhati, Jalpaiguri, Lucknow, Patna, Pochampad and Surat have been set up.

In the Fifth Plan, an outlay of Rs 281 crores has been proposed for flood control as compared to Rs 162 crores in the Fourth Plan.

Floods of 1974 and 1975

During 1974, severe floods visited the Brahmaputra valley in Assam, north Bihar, eastern parts of Uttar Pradesh and north Bengal. Floods were experienced in some other states also. Heavy rainfall and landslides caused considerable damage in Kerala and Karnataka. A cyclonic storm followed by heavy rainfall caused damage in the sourhern parts of West Bengal and coastal north Orissa. The total damage due to floods and cyclones in 1974 was about Rs 569 crores.

During the 1975 monsoon, Bihar and some other states experienced the fury of floods with heavy damage to life and standing crops. Three-fourths of Patna, the state capital of Bihar, was under neck-deep water.

ANTI-SEA EROSION

Sea erosion occurs at different places along about 6,100 km long coastline of India. The problem is, however, of a serious nature in a stretch of about 320 km of the 550-km coastline in Kerala. Protection measures were started at the end of the First Plan and by the end of the Fourth Plan. A length of 113 km had been protected at a cost of about Rs 17.5 crores. Of this, about Rs 10 crores were spent in the Fourth Plan. For the Fifth Plan, a provision of Rs 20 crores has been made. The likely achievement during 1974-75 is protection of about 13 km of additional length of sea coast.

A Beach Erosion Board was set up by the Government of India in 1966 for reviewing the anti-sea erosion programme in Kerala. The Board was reconstituted in 1971, enlarging its scope of work to cover the sea erosion problem in the entire country.

CENTRAL ORGANISATIONS

There are three central organisations, which are responsible for planning, development and research in the fields of irrigation.

The Central Water Commission is responsible for initiating and co-ordinating, in consultation with state governments, schemes for control, conservation and utilisation of water resources for purposes of irrigation, navigation and flood control throughout the country. The Commission has been playing an important role in the fields of planning, investigation, designing and research on multipurpose river valley projects and flood control.

The Central Board of Irrigation and Power constituted in 1927, initiates fundamental research in the fields of irrigation and power and co-ordinates the work of research stations established in different parts of the country.

The third organisation is the Central Water and Power Research Station at Khadakvasla near Pune. For details see Chapter 7, 'Scientific Research'.

Water and Power Consultancy Services

Another organisation known as the Water and Power Development Consultancy Services (India) Ltd. was registered as a company in 1969 with a view to making India's expertise in the fields of irrigation and power available to developing countries. The organisations of the Government of India which are the constituents of this company are: the Central Water Commission, Central Electricity Authority, Geological Survey of India, India Meteorological Department, Survey of India, Central Ground Water Board and Indian Council of Agricultural Research.

The company provides, among other services, engineeringand consultancy services for development of water resources, irrigation and drainage, electrical power, flood control and water supply projects, pre-investment surveys and complete design.

The works completed by the company include (i) field investigations and preparation of the feasibility report for the Ban Mak Nao Project in Laos, (ii) preparation of project reports for a number of micro-hydel schemes in Afghanistan, (iii) preparation of a report on water resource surveys of Singdia region in Tanzania, (iv) investigations for Helmand Valley Development in Afghanistan, (v) review of project report of Sedawgyi Project in Burma, (vi) investigations for Kotmale Hydro-electric Project in Sri Lanka, (vii) Khanabad Irrigation Project in Afghanistan, and (viii) design of transmission lines in Mauritius. It has also provided experts on flood control to the Asian Development Bank for the Wampu river flood control project in Indonesia and three experts for the Uda Walawe project in Sri Lanka.

At home, the company is handling major jobs like complete designing of Vijaywada thermal power station, and investigation for a major irrigation scheme in Rajasthan.

INTERNATIONAL AGREEMENTS

Indus Commission

India and Pakistan signed the Indus Water Treaty on 19 September 1960 fixing and delimiting the rights and obligations of the two countries with regard to the use of the waters of the Indus river system. It came into force with retrospective effect from 1 April 1960. As envisaged in the treaty, a permanent Indus Commission, representing both the governments, has been set up to establish co-operative arrangements for the implementation of the treaty.

Indo-Bangladesh Rivers Commission

An Indo-Bangladesh Joint Rivers Commission was established in 1972 to maintain liaison between the two countries and to carry out

surveys of the river systems shared by them and to formulate joint flood control projects. The Commission has taken up short and medium-term schemes of mutual benefit.

Indo-Bangladesh Power Board

The main functions of the Indo-Bangladesh Power Board are to maintain liaison between India and Bangladesh for maximising the benefits from the power systems and energy resources of both the countries and to formulate and implement proposals with the approval of the two governments.

ASSISTANCE TO FOREIGN COUNTRIES

India is assisting a number of developing countries to set up irrigation projects.

India is supplying to Afghanistan generators, steel, penstocks, pipes and electrical equipment for the construction of the Chardeh Ghorband irrigation-*cum*-micro-hydel project. Investigations for the Rodbare Dam and canal system and overall planning for the development of the Lower Helmand River Basin were carried out as part of India's assistance to Afghanistan.

India, in association with various UN agencies and other countries, is participating in the development of the lower Mekong basin to benefit the four riparian countries of Thailand, Laos, Cambodia and southern Vietnam. Equipment in the form of gates and hoists has been supplied for the construction of the Prek Thnot project in Cambodia. Equipment was also supplied for the setting up of the sedimentation testing laboratories at Pakse and Vientiane in Laos.

Indian experts have been sent to Kenya for assisting that country in the planning and execution of flood control projects.

India is also to assist Nepal in the setting up of a design and construction organisation for the utilisation of water and power resources in that country.

15 RURAL DEVELOPMENT

COMMUNITY DEVELOPMENT

The community development programme, launched on 2 October 1952, aims at bringing about an integrated development of rural India covering the social, cultural and economic aspects of community life. This is sought to be achieved through the fullest development of available human and material resources on an area basis and thereby raise the rural community to higher levels of living with the active participation and on the initiative of the people themselves. The highest priority in the programme is accorded to agriculture, the mainstay of about 70 per cent of the rural population. Other important sectors include improvement of communications, health, sanitation, housing, education, rural employment, welfare of women and children and cottage and small-scale industries.

The basic objective of the programme has not undergone any significant change during the Five Year Plans, though in the process of working there have been some variations in the emphasis in the programme aspect. In keeping with the objective of achieving growth with social justice, the Fifth Five Year Plan has stressed the need to orientate integrated rural development towards more employment and better production base.

At the beginning of the Fourth Plan, there were 5,265 community development blocks in the country. Following reorganisation in many states, the number came down to 5,123 on 2 April 1974. This included 483 tribal development blocks.

Programme Pattern

Initially, a community development block covered an area of about 1,300 sq. km with about 300 villages and a population of about 2,00,000. The pattern was revised from 1 April 1958. A block now covers an area of about 620 sq. km with 110 villages and a population of about 92,000. A block has two active stages of operation, stage I of five years followed by stage II of another five years. At the end of ten years, the block enters post-stage II phase.

On 2 April 1974, out of 4,177 blocks for which stage-wise breakup was available, 22 were in stage I, 498 in stage II and 3,657 in post-stage II phase. For implementing the programme in the blocks, there is a schematic budget provision of Rs 12 lakhs for stage I and Rs 5 lakhs for stage II. Supply of funds for the blocks remained mainly the responsibility of the central government till the end of the Third Plan (1966). But from the beginning of the Fourth Plan (April 1969), the financial arrangements became the responsibility of the states.

Table 15.1 gives details of the coverage and state-wise distribution of community development blocks.

Finance

The total resources available for integrated development are much more than the nucleus budget provided for the programme. These are supplemented by resources of substantive development departments like agriculture, health and education. Besides, there are mobilisation efforts by Panchayats and voluntary contributions by the people.

(*As on 2 April 1974*)

TABLE 15.1 COVERAGE AND DISTRIBUTION OF COMMUNITY DEVELOPMENT BLOCKS

State/Union Territory	Number of allotted blocks	Population covered (lakhs)	Villages covered ('00)
Andhra Pradesh	324	380	271
Assam	130	142	208
Bihar	587	527	677
Gujarat	218	218	186
Haryana	87	94	71
Himachal Pradesh	69	33	117
Jammu and Kashmir	73	38	66
Karnataka	175	240	264
Kerala	144	194	16
Madhya Pradesh	457	368	704
Maharashtra	443	383	359
Manipur	14	9.3	19
Meghalaya	24	9.4	49
Nagaland	21	4.9	8
Orissa	314	208	465
Punjab	116	115	129
Rajasthan	232	226	322
Sikkim	N.A.	N.A.	N.A.
Tamil Nadu	374	330	141
Tripura	17	15	49
Uttar Pradesh	875	773	1,126
West Bengal	335	358	385
Andaman and Nicobar Islands	5	1.2	4
Arunachal Pradesh	43	4.5	22
Chandigarh	1	0.2	N.A.
Dadra and Nagar Haveli	2	0.7	1
Delhi	5	4.2	3
Goa, Daman and Diu	10	8.0	2.5
Lakshadweep	4	0.3	N.A.
Mizoram	20	23.2	—
Pondicherry	4	4.5	4
ALL-INDIA	5,123	4,712.4	5,668.5

N.A.—Not available.

Expenditure under the Plans

The expenditure on community development in the first three Five Year Plans was Rs 501 crores. From 1967-68 to 1973-74, it was Rs 172.38 crores. The expenditure in 1973-74 was Rs 34.83 crores. The Fifth Plan outlay for community development is Rs 129.8 crores.

Policy

The Department of Rural Development in the Ministry of Agriculture lays down policy relating to the community development programme and also formulates the pattern of expenditure to be incurred in the blocks. The responsibility for the execution of the programme is that of state governments.

Advisory Body

To advise the central government on the twin programmes of community development and Panchayati Raj, a joint consultative council was constituted in 1971. Till then there were two separate councils, one each for community development and Panchayati Raj.

Organisation

A Development Commissioner is in charge of the community development programme in every state. He also co-ordinates the policies and programmes of different state departments connected with rural development. In some states, however, there is an integrated department of agricultural production and rural development under a Secretary called the Agricultural Production Commissioner. He is in

charge of agriculture in its wider sense, including community development, Panchayati Raj and co-operation.

At the district level, Zila Parishad is responsible for the coordination and implementation of the programme. The Parishad consists of elected representatives of the people, including the presidents of the Block Panchayat Samitis, members of Parliament and members of Legislative Assemblies from the concerned districts.

At the block level, the Panchayat Samiti is responsible for the programme. Its members include elected Sarpanchs (presidents of village Panchayats) and a few co-opted persons representing women, scheduled castes and scheduled tribes. The administrative personnel, consisting of a Block Development Officer and eight Extension Officers who are experts in different fields such as agriculture, co-operation and animal husbandry, work under the direction of the Samiti. Voluntary associate organisations like youth clubs, farmers' forums and Mahila Mandals, supplement the work of the Panchayats. At the village level, while the Panchayat is in overall control of the programme helped by associate organisations, the Gram Sevak acts as a multi-purpose extension agent having about 10 villages in his charge.

SPECIAL PROGRAMMES

A number of special programmes are in operation for the benefit of the rural population. These are described below.

Drought Prone Areas Programme

The Drought Prone Areas Programme, formerly known as Rural Works Programme, was initiated in 1970-71 as a non-central sector scheme. Seventy-four districts have been identified as drought prone and they have been grouped under 54 units. The programme aimed at mitigating the severity of scarcity conditions by executing rural works for generating employment.

In the Fifth Plan, the main thrust is to restore proper ecological balance in the drought prone areas. Some of the important elements envisaged in this integrated approach are changes in agronomic practices, restructuring of cropping pattern and pasture development through proper management of irrigation resources, livestock development and development of small and marginal farmers and agricultural labourers. An allocation of Rs 187 crores has been made in the Fifth Plan. Six districts, one each in Andhra Pradesh and Karnataka and two each in Maharashtra and Rajasthan, are covered under the programme with World Bank assistance. Project reports on the basis of the new strategy of development have been received from these districts.

During the Fourth Plan, Rs 92.27 crores were spent on the programme. Of the total expenditure, about 55 per cent was on irrigation works, 14 per cent on soil conservation and afforestation, 26 per cent on road-building and the balance on drinking water. Schemes costing about Rs 41.85 crores were sanctioned during 1974-75.

Prime Minister's Drought Relief Fund

The Prime Minister's Drought Relief Fund was set up in 1966 to mobilise resources for the relief of distressed persons in drought-stricken areas. The approved purposes now include assistance to the victims of other natural calamities.

Contributions to the Fund qualify for exemption from income-tax. Disbursements are made with the personal approval of the Prime Minister. The amount disbursed since the establishment of the Fund total Rs 1.89 crores, of which Rs 1.74 crores were sanctioned for relief operations and Rs 15 lakhs for protective irrigation works.

Crash Scheme for Rural Employment

The Crash Scheme for Rural Employment was started in 1971 for three years with an allocation of Rs 150 crores for the benefit of the unemployed in rural areas. In the last year of its operation in 1973-74, Rs 42.31 crores were spent which resulted in the generation of 1,025.19 lakh mandays of employment. The projects executed under the scheme related to road building, reclamation and development of land, flood protection, minor irrigation and afforestation.

PIREP

The Pilot Intensive Rural Employment Project (PIREP) was launched in 1972-73 in 15 selected blocks to assess the dimension of the problem of unemployment, its extent and pattern and the probable cost of full employment. In the first year of its operation, Rs 1.18 crores were spent which resulted in the generation of 33.70 lakh mandays of employment. In the second year, Rs 2.18 crores were spent, resulting in generation of 50.14 lakh mandays.

Applied Nutrition Programme

The Applied Nutrition Programme, a centrally-sponsored programme carried out in collaboration with UNICEF, FAO and WHO, is intended to educate the rural people in improved nutrition. The programme specially aims at securing needed nutritional supplements for children below 5 years and expectant and nursing mothers. Gram Panchayats, Yuvak and Mahila Mandals are actively associated with the production of nutrition foods.

Up to 31 March 1975, the programme had covered 1,275 blocks. The Plan outlay for this purpose is Rs 20 crores. The central government has provided Rs 1.50 crores for the programme besides a provision of Rs 4 lakhs for evaluation in 1975-76. During 1974-75, 94 new blocks were allotted and during 1975-76, 100 new blocks are proposed to be set up. The programme is assisted by the centre to the extent of Rs 30,000 annually to each on-going and new block and extended support of the order of Rs 15,000 for one year.

Composite Programme for Women and Pre-school Children

The Composite Programme for Women and Pre-school Children launched in 1969-70 lays stress on organised activities in nutrition, education and allied fields through the existing institutions of Mahila Mandals and Balwadis. The scheme operates in rural areas not covered by the applied nutrition programme and family and child welfare projects. The programme has five components, three in the central sector with full financial assistance and two in the state sector for which funds are provided by states and union territories.

Pilot Research Project in Growth Centres

This centrally-sponsored scheme was initiated during the Fourth Plan with an outlay of Rs 75 lakhs. It aims at evolving a broad research methodology for the development of emerging and potential growth centres by providing social and economic overheads in delineated areas in terms of a prepared inventory of local needs.

Twenty research and investigation cells were established under the scheme in different states and union territories to collect relevant data through field surveys and prepare action programmes for the creation of infrastructure facilities in the base areas for their development. All the 20 research cells have since finalised their report.

OTHER PROGRAMMES

Besides the special programmes, a number of other programmes are also being implemented for the integrated development of rural areas. These are briefly described below.

Agriculture and Allied Programmes

For motivating farmers to maximise production, community development and Panchayati Raj agencies are giving top priority to agriculture and allied programmes. These include formulation and implementation of field programmes for the development of horticulture, animal husbandry, distribution of improved seeds, fertilizers, pesticides, construction and maintenance of minor irrigation works, bunding and a host of other activities.

The average distribution per block during 1973-74[1] was 1,496 quintals of seeds, 13,818 quintals of fertilizers, 215 quintals of pesticides and 105 implements as against 1,520 quintals of seeds, 13,720 quintals of fertilizers, 219 quintals of pesticides and 103 implements in the previous year[2]. In the same period[1] 14.42 lakh hectares of cultivated area were improved through bunding and terracing and 3.01 lakh hectares of land reclaimed. The corresponding figures for the previous year were 13.83 lakh hectares and 3 lakh hectares[2].

Whole Village Development Programme

For both special and functional integration of all programmes connected with agricultural production and reduction of unemployment and under-employment, a new programme called the Whole Village Development Programme is being implemented in the Fifth Plan period. To start with bench mark surveys are being undertaken in Bihar, Orissa, Tamil Nadu and Uttar Pradesh. Basic components of the programme are consolidation of holdings, overall land development planning through irrigation support and restructuring of the cropping pattern. The Fifth Plan outlay for the new scheme is Rs 5 crores.

Village and Small Industries Programme

Village and small industries in the blocks are given financial assistance in the shape of loans as well as grants and subsidies. Loans amounting to Rs 1.26 crores were given to rural artisans in 1973-74[1]. In the same year 13,879 industrial units were located in villages with a population of 5,000 or less as against 13,871 units in 1972-73. Improved tools worth Rs 10.31 lakhs were distributed in 1973-74[1] as against tools worth Rs 7.05 lakh distributed in 1972-73[2].

Health and Family Planning

To create awareness and responsiveness among the village people about the need to have a small family, family planning receives high priority in the block programmes. A total of 4,932 primary health centres were in existence on 31 March 1974 and 13,115 family planning centres were functioning in rural (main) centres. At the end of 1973-74, one primary health centre, 4 rural dispensaries and 3 family planning centres were operating in each block.

Voluntary Action and Public Co-operation Schemes

To promote voluntary action and public co-operation in community development programme, new schemes were prepared for inclusion in the Fifth Plan with an outlay of Rs 1.78 crores. These schemes include various measures for promotion of associate organisations, introducing simplified system of registration of rural voluntary groups, helping them undertake definite activities and giving them maintenance grants and incentive awards.

Social Education

The total number of adult literacy centres in operation in the blocks on 31 March 1974 was 6.78 lakhs, imparting literacy to about 1.85 crore adults. The number of new centres started and adults made

[1] Figures are provisional.
[2] Estimates.

literate during 1973-74 was 20,000 and 3.66 lakhs as against 17,000 and 3.46 lakhs respectively in 1972-73.

There were 53,012 Mahila Mandals with a membership of 14.31 lakhs during 1973-74 as compared to 52,632 with a membership of 13.9 lakhs in 1972-73. Over 1,04,497 youth clubs with a membership of 18.8 lakhs were in existence during 1973-74 as against 85,768 with a membership of 18.8 lakhs during the previous year. The number of social education organisers and Mukhya Sevikas in position in 1973-74 in various states and union territories was 6,731 and 2,263 respectively.

Tribal Development Blocks

For the development of the tribal areas, 483 tribal developmental blocks were functioning on 31 March 1974 after reorganisation of the T.D. blocks in Mizoram. A sum of Rs 32.50 crores had been provided for these blocks during the Fourth Plan period.

In the Fifth Plan, Rs 10 crores have been provided for this programme for the first year of the Plan. The stress will be on integrated area development plans which will combine the activities of tribal development blocks with tribal development agencies and other projects launched by the central government in states.

Pilot Project for Tribal Development

A special programme called the Pilot Project for Tribal Development was launched in 1972-73 for the development of six selected tribal areas in Andhra Pradesh, Bihar, Madhya Pradesh and Orissa. Under this programme, the special tribal development agencies are studying in depth the problems of tribal areas relating to communications, administration, social services and economic development, especially agriculture. This programme will, for the present, continue till 1976-77. Two more projects, similar to the existing six, have been taken up as part of the Fifth Plan programme. An amount of Rs 10 crores has been allocated in the Fifth Plan for all the 8 TDA projects. During 1974-75, a provision of Rs 1.50 crores was made. The total grants-in-aid given to these projects since their inception is Rs 5.75 crores.

Hill Areas Development Programmes

For all round development of agriculture and improvement in the living conditions of the farmers in the hilly areas, some pioneering projects were taken up in Himachal Pradesh, Tamil Nadu and Uttar Pradesh under the Indo-German Assistance Programme. Based on the encouraging results achieved in these projects, two more such projects in Manipur and Uttar Pradesh were taken up in the last year of the Fourth Plan but financed entirely out of domestic resources. These projects will continue in the Fifth Plan and Rs 3 crores have been allocated for the purpose. During 1974-75, a sum of Rs 32 lakhs had been provided.

TRAINING

With a view to developing proper understanding of the basic objectives underlying the community development and Panchayati Raj programmes, training is given at Composite Training Centres under the administrative control of various state governments to officials and non-officials connected with these programmes.

The National Institute of Community Development, Hyderabad, which is an autonomous body, functions as an apex institute for providing training in the philosophy and aims of community development. It also functions as a clearing house of information on community development and Panchayati Raj.

Various other schemes are in operation to provide training to the rural youth (through short duration camps and encouraging economic activities through grant of incentive awards), people's representatives in Panchayati Raj institutions and village leaders (through sammelans) and school teachers (through orientation courses).

Trainees from developing countries confronting similar problems as in India in raising the living standard of the rural people have been availing of the training facilities under the Technical Co-operation Scheme of the Colombo Plan, Special Commonwealth African Assistance Plan and the Indian Technical Economic Co-operation Programme. Besides, short visits are arranged for visitors from other countries, like Britain and the United States of America. In 1974-75, study tours were arranged for 7 nominees of foreign governments and from developing countries and 100 visitors from Britain, USA, Denmark and Mauritius.

ACHIEVEMENTS Table 15.2 shows the achievements in selected items of activity under the community development programme.

TABLE 15.2
ACHIEVEMENTS OF C.D. PROGRAMME

Activity	Total achievements during		Average achievement per reporting block	
	1972-73 ('000)	1973-74[1] ('000)	1972-73	1973-74[1]
I Agriculture				
Improved seeds distributed (quintals)	67,48	67,85	1,520	1,496
Chemical fertilizers distributed (quintals)	6,09,15	6,26,79	13,720	13,818
Chemical pesticides distributed (quintals)	9,72	9,76	219	215
Improved implements distributed	4,58	4,76	103	105
Agricultural demonstrations held	3,63	3.76	80	83
New compost pits dug	44,38	54,17	991	1,194
II Land Improvement				
Land reclaimed (hect.)	3,00	3,01	68	66
Area bunded and terraced (hect.)	13,83	14,42	311	318
III Animal Husbandry				
Improved animals supplied	31	39	7	9
Improved birds supplied	21,22	21,41	479	472
Animals castrated	33,38	35,95	714	793
Animals artificially inseminated	21,40	22,67	483	503
IV Health and Rural Sanitation				
Rural latrines constructed	34	41	8	9
Pucca drains constructed (metres)	17,91	15,01	403	331
Village lanes paved (sq. metres)	20,02	21,61	451	476
Soakage pits constructed	59	66	13	15
Drinking water wells constructed	28	24	6.3	5.3
Drinking water wells renovated	21	22	4.7	4.9
V Social Education				
Adult Literacy Centres started	17	20	3.8	4.4
Adults made literate	3,46	3,66	78	81
Functional Gram Sahayak camps organised	4	6	0.9	1.3
Leaders trained	1,16	1,33	26	29
VI Communications				
New kacha roads constructed (km)	64	36	14	8
Existing kacha roads improved (km)	62	54	14	12
Culverts constructed	22	18	5	4
VII Village and Small Industries				
Value of improved tools and appliances distributed:				
(a) Blacksmithy (Rs)	2,27	5,33	51	118
(b) Carpentry (Rs)	4,78	4,98	108	110

[1]Provisional.

Liquidation of Rural Indebtedness

Rural indebtedness is an old problem of our country. For centuries, millions of rural poor suffered at the hands of unscrupulous money-lenders. The All India Debt and Investment Survey 1971-72, sponsored by the Reserve Bank of India, revealed that the highest burden of debt was on agricultural labourers. A committee appointed by the Department of Rural Development of the Ministry of Agriculture and Irrigation suggested total relief of indebtedness for landless labourers. The government's resolve to put an end to rural indebtedness was expressed in the Prime Minister's 20-point Economic Programme.

Announcing the new economic measures on 1 July 1975, Shrimati Indira Gandhi said that her government proposed to take action by stages to liquidate rural indebtedness. Accordingly, the central and state governments initiated several steps to provide debt relief to the most oppressed sections of the rural population. Many states have already declared a moratorium on debts and, debts incurred by the very poor have been liquidated. Alongside, steps have been taken to arrange for alternative sources of credit for the rural poor, like disbursement of taccavi loans and establishment of regional rural banks.

PANCHAYATI RAJ

Panchayati Raj, which was introduced in 1959, is a three-tier structure of local self-government at the village, block and district levels. However, the states are free to make changes in the structure to suit local conditions. All Panchayati Raj bodies are organically linked up. Special representation on these bodies is given to interests like backward classes, women and co-operative societies. Elected directly by and from among villagers, the Panchayats are responsible for agricultural production, rural industries, medical relief, maternity and child welfare, common grazing grounds, village roads, tanks and wells and maintenance of sanitation. In some places they also look after primary education, maintenance of village records and collection of land revenue.

Coverage

Panchayati Raj now covers all the states excepting Meghalaya, Nagaland and 23 out of 31 districts in Bihar. The institution of village Panchayats exists in all the union territories except Lakshadweep, Mizoram and Pondicherry. Arunachal Pradesh has a three-tier system of Panchayati Raj.

There are at present 2,19,892 village Panchayats covering a population of 40.68 crores. In addition, there are 3,863 Panchayat Samitis and 201 Zila Parishads.

Activities

The Panchayat, the co-operative and the school are the basic institutions at the village level for carrying out the programme of democratic decentralisation. The elected Panchayat is in charge of all development programmes in the area. The co-operative functions in the economic sphere. The village school, which is also a community centre, looks after educational, cultural, recreational and allied fields. Associate organisations, such as, women and youth organisations, farmers' and artisans' associations functioning in their respective spheres, are linked up with the Panchayat in its development activities and are supported in turn by the Panchayat in their work.

With most of the country covered by Panchayati Raj, the emphasis now is on consolidation of these institutions and bringing into sharper focus their role in the rural development effort.

Finance

Panchayati Raj institutions have their own powers of taxation. They levy taxes on houses and some types of lands, fairs and festivals and sale of goods and impose octroi duties. They also build up remunerative community assets.

The powers and responsibilities of Panchayati Raj institutions are derived not only from the respective state legislations, but also from the procedures—administrative and financial—laid down by state governments to give effect in practice to the statutory provisions. Gujarat, Maharashtra and Tamil Nadu have invested their institutions with programme responsibilities over a wide and growing range of activities. Some state governments, namely, Andhra Pradesh, Bihar, Gujarat, Maharashtra and Rajasthan appointed high power committees to suggest improvements in the working of Panchayati Raj system. The reports of these committees are being examined by respective state governments.

Nyaya Panchayats

For providing a speedy and inexpensive system of justice to the villagers, Nyaya (judicial) Panchayats or village courts are functioning in some of the states.

16 CIVIL SUPPLIES AND COOPERATION

CIVIL SUPPLIES

The Department of Civil Supplies and Cooperation was created in October 1974 as a part of the reconstituted Ministry of Industry and Civil Supplies. As a nodal Department, its function is to assist multi-pronged fiscal, monetary and administrative action on the part of the concerned Ministries and Departments of the central and state governments to control inflation and to augment the production and distribution of essential commodities. Bringing together of the civil supplies and cooperation highlighted the Government's policy to involve cooperatives more actively in the public distribution system even while taking steps to strengthen the cooperative organisations, more particularly in the productive sectors.

In the past, steps had been taken to meet situations arising out of scarcity of essential commodities and rising prices. As early as 1955, the Government of India had listed a number of commodities (which number 61 now) under the Essential Commodities Act and took legal measures for preventing hoarding and blackmarketing of those 'essential commodities'.

But in September 1974 a situation arose when, in the wake of world wide inflation which gripped India as well, the wholesale price index stood at its highest point of about 330 representing an annual rate of inflation of 31.4 per cent over the previous year. Galloping inflation hit large masses of poor people very hard. The existing public distribution system, specially for foodgrains, came under severe strain. There were shortages even of common items of mass consumption such as vanaspati, soap and baby-food. Before the Department of Civil Supplies and Cooperation was created, there were many Ministries which were concerned with the production and administration of essential articles. Enough stress was not laid on establishing an effective distribution system.

With the creation of the new Department, measures were taken simultaneously on many fronts—monetary, fiscal and administrative. One of the first priorities was to pursue, with the help of state governments, deterrent action against black-money, smuggling, profiteering and hoarding under MISA, DIR and the amended Essential Commodities Act, which provides enhanced punishment for offenders and summary trials. A crash programme for increasing the production of essential commodities was also launched.

Categories of Essential Items

After detailed consultations with concerned state ministers for food, civil supplies and cooperation and the concerned Ministries of the Government of India, specific problem areas with reference to basic needs of the weaker and vulnerable sections of the population were identified and measures taken for priority distribution of seventeen categories of essential items. These items have further been divided into three broad categories according to importance. The first category comprises foodgrains, namely, wheat and rice (including coarse grains and pulses where necessary), sugar, standard cloth, vanaspati and edible oils,

kerosene oil, soft coke and salt. In the second category are cement for housing and agricultural needs, cultural paper for students, diesel oil for agricultural needs, essential drugs, soap, including washing soap, matches and soda-ash. Baby food, tyres and tubes for cycles, scooters, buses and trucks and common footwear form the third category. In addition, steps are taken to meet specific requirements of particular areas like salt in the eastern and north-eastern regions, soft coke in the northern and central regions, coarse grains and pulses for industrial and agricultural labour in several deficit areas.

Approach

For meeting the problem of supply of some of these commodities, a two-fold strategy is adopted; first, the 'commodity approach' envisages preparation of annual commodity budgets, in the widest sense, aiming at balancing the supply and demand of these commodities; secondly, the 'area approach' which seeks to ensure that essential commodities reach the vulnerable areas like metropolitan and large urban areas, labour concentrations in mining, industrial and plantation areas, district headquarters, hilly areas, rural areas in chronically scarcity affected or deficit districts and areas inhabited by vulnerable and poorer sections of the population.

Distribution of Essential Commodities

In pursuance of the strategy, a programme was adopted for extension of the public distribution system through fair price shops and consumer cooperatives to vulnerable areas. Special arrangements were made for facilitating movement of essential commodities to deficit areas like coastal shipping for movement of 3 lakh tonnes of salt for West Bengal and rail movement of soft coke to states in the northern region where substantial quantities were required as domestic fuel for the common man during winter. A special cell was set up in the Ministry to arrange for critical inputs, specially rail movement of coal, for augmenting production in core sectors.

The public distribution system now comprises over 2.33 lakh fair price shops/cooperative shops in the country as against 2.07 lakhs at the end of December 1972. These fair price shops cover a population of about 46.36 crores. There is also a net-work of over 6,000 outlets mainly in the northern region for soft coke, over 1.66 lakh retail outlets for kerosene oil and 29,000 retail outlets for controlled cloth out of which more than 75 per cent are in the rural areas. Distribution of levy sugar and free sale sugar has been increased substantially. Retail price of levy sugar has been kept the same as in the previous year, namely, Rs 2.15 per kg throughout the country. The quantum of monthly releases of levy sugar and free sale sugar has also been increased from 1,80,000 tonnes in May 1975 to 3.15 lakh tonnes in December 1975 comprising 2.25 lakh tonnes of levy sugar and 90,000 tonnes of free sale sugar. These additional releases have brought down prices of open market sugar. Increased allocation of food-grains has also been provided through the public distribution system specially in deficit areas. Steps have been taken to augment the production and movement of soft coke to 37 lakh tonnes in 1975-76, an increase of about 33 per cent over last year's production. Since soft coke is the domestic fuel for the common man, it was decided not to revise its pithead price, fixed at Rs 86 per tonne in May 1974, though an average increase of Rs 17.50 per tonne in the price of raw coal was made effective from 1 July 1975. This involved a liability of Rs 16 crores during 1975-76 on the two public sector undertakings, the Coal Mines

Authority Ltd. and Bharat Coking Coal Ltd. which were made to bear the incidence of the consequential loss.

Model Scheme for Distribution of Essential Commodities

A model scheme for distribution of selected essential commodities has been taken up for implementation in Delhi. The scheme removes the distinction between urban and rural areas, guarantees assured supplies of selected essential commodities by enlisting cooperation of public voluntary organisations and cooperatives and by more stringent enforcement of control orders and elimination of bogus cards.

Rice, wheat, sugar, soft coke, kerosene oil and controlled cloth will be provided to consumers on ration cards. The existing channels of distribution will be further rationalised. Ward-committees comprising housewives from each mohalla or locality would be entrusted with the work of maintaining contacts with consumers, inspection of retail outlets, disseminating information to consumers relating to arrival of stocks and their distribution and attending to consumer grievances. These committees would also help in eliminating adulteration and use of inaccurate weights and measures. Authority has been given to 15 women honorary social workers to exercise the powers of Civil Supplies Officer in checking fair price shops and ensuring proper distribution of essential commodities. Mohalla (locality) committees have been formed in 105 panchayats and steps are under way to cover the rest of the villages.

Similar model schemes are being prepared for Nainital in Uttar Pradesh, Durgapur in West Bengal, Cochin in Kerala and Coimbatore in Tamil Nadu. On the basis of experience gained from these typical rural, urban, industrial, mining and hill areas, further detailed guidelines will be provided for strengthening the public distribution arrangements throughout the country.

Consumer Cooperatives

Cooperatives have been given a key role in the public distribution system. Government policy is to give preference to cooperatives while granting licences in retail trade in controlled commodities. A percentage of the production has been earmarked for the cooperative sector, ten to twenty per cent in the case of certain commodities, *viz.*, baby food, textiles, dry battery cells, razor blades, tyres and tubes of cycles, rickshaws and scooters have been earmarked by the manufacturers for sale through consumer cooperatives. Foodgrains are generally procured by cooperatives through the Food Corporation of India or public agencies or direct from the open market. In regard to foodgrains, the Food Corporation of India has been assigned a role in wholesale procurement, timely allocation and movement of foodgrains. In 1974, 1.06 crore tonnes of foodgrains were distributed from government stocks to the public distribution system. The State Civil Supplies Corporation set up in the states of Andhra Pradesh, Bihar, Karnataka, Kerala, Madhya Pradesh, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal, would undertake the responsibility for bulk procurement of goods and not normally cater to business in manufactured articles or in retail trade.

The four-tier structure of consumer cooperatives now covers most of the urban areas, particularly towns having a population of 50,000 and above. At the apex is the National Cooperative Consumer Federation. Then there are 14 State Federations of Consumer Cooperatives and 424 wholesale Central Consumer Cooperative Stores. The latter have 2,640 branches at the primary level. These branches and another 14,275 primary cooperative societies are engaged in the

distribution of essential commodities. There are also 171 cooperative departmental stores which deal in a wide range of essential consumer commodities. The total value of consumer goods distributed by consumer cooperatives during 1974-75 through about 17,500 retail points in urban areas and about 53,000 retail points in rural areas is estimated at over Rs 800 crores.

To bring down the open market prices and also supply essential commodities in deficit areas, the National Agricultural Cooperative Marketing Federation procured stocks of various foodgrains, pulses, oilseeds, etc., at an estimated value of over Rs 2.50 crores. The allocation of soda-ash to the NCCF has been increased from 3,600 tonnes to 16,000 tonnes per year for distribution through cooperatives. Also 12,000 tonnes of white printing paper has been allocated to the NCCF for manufacture of exercise books and their sale to students through consumer cooperatives. Consumer co-operatives have also been directed to arrange for the distribution of essential commodities on concessional terms to students' hostels in universities and degree colleges.

Better Production

Being an important aspect of improving availability, steps were taken to augment production of essential commodities and items of mass consumption. In the year 1975, there has been considerable improvement in the production of foodgrains, sugarcane and oilseeds. There has also been significant step-up in the production of essential manufactured commodities. During 1975, as compared to the previous year, the production of baby food has increased by 84.6 per cent, soap by 17.9 per cent, cement by 14.0 per cent, razor blades by 13.7 per cent, leather footwear by 10.9 per cent, rubber and plastic footwear by 4.2 per cent, cultural paper by 2.7 per cent and soda ash by 1.9 per cent. In the small-scale sector, there has been substantial increase in the production of cycle tyres off-setting the shortfall in production in the organised sector. Similarly in regard to matches, the fall in production to the extent of 12.6 per cent in the organised sector has been made good by increased production in the cottage sector which accounts for 60 per cent of the total production.

Fall in Prices

The wholesale prices touched their peak in September 1974 when the index stood at 329. In June 1975, the index came down to 312 showing a fall of 5.1 per cent. In the months after the proclamation of the Emergency there has been a further decline in the wholesale prices. The latest available wholesale price index for January 1976 stands at 290.4 registering a fall of nearly 7 per cent during the seven months—July 1975 to January 1976. This is the sharpest fall in wholesale prices that the country has witnessed in recent years. On the basis of 12-monthly average, the wholesale price index showed a negative rate of inflation of 0.4 per cent in January 1976.

In October 1974, the consumer price index for industrial workers touched the peak of 335. Since then it started declining and reached 328 in June 1975, showing a fall of 2.1 per cent. In December 1975 it fell to 306. In other words, between July 1975 and December 1975, the consumer prices for industrial workers went down by 6.7 per cent. The declining trend in consumer prices for agricultural labourers was even sharper. The index which reached an unprecedented level of 385 in October 1974 declined to 375 in June 1975 (a fall of 2.6 per cent). Since then the index declined sharply reaching 316 in

December 1975. As such, there was a remarkable decline of 15.7 per cent in consumer prices for agricultural labourers in the first six months of Emergency.

A noteworthy feature of the price trend was the decline in the prices during the lean period May to October 1975. An upward trend in prices during this period is considered a normal feature in the movement of prices in the Indian economy. In 1973 and 1974, the lean period witnessed an increase of 14 per cent and 12 per cent in wholesale prices respectively. In May to October 1975, the wholesale prices declined by 0.23 per cent. On point to point comparison the minus rate of inflation in respect of consumer prices for industrial workers reached 6.1 per cent and that of agricultural labourers 13.4 per cent in December 1975.

Data received from the states and union territories indicate substantial decreases since the proclamation of Emergency in the retail prices of rice, wheat, bajra, maize, arhar dal, moong dal, gram, groundnut oil, mustard oil, gingelly oil, toilet soap including Janata soap, common brands of tea, soda ash, matches, etc.

There has been substantial improvement in the availability of essential commodities and items of mass consumption particularly on account of augmented production, streamlining of the public distribution system, intensification of vigilance against hoarders, black marketeers and other anti-social elements, implementation of the order regarding display of lists of prices and stocks of essential commodities by retailers all over the country and the implementation of the Packaged Commodities Regulation Order which became effective from October 1975.

Monitoring

Another important step taken in this regard is the monitoring of prices and availability. Soon after the proclamation of Emergency, a Control Room was set up in the Department which keeps a constant watch on the movement of retail prices and shortages, if any, throughout the country. As a result of this measure it has been possible to rush supplies of essential commodities to affected areas within 3-4 days to meet localised shortages.

CONSUMER MOVEMENT

Several consumer guidance associations have been activised and are doing useful work, not only in supervising the distribution of essential commodities but also for checking trade malpractices, especially adulteration and use of inaccurate weights and measures. The consumer movement is gaining momentum, especially with the removal of the psychosis of shortages, and the emphasis on streamlining the distribution system, improvement in the quality of mass consumption goods, increasing awareness amongst women and the recognition of the rights of the consumer in the Prime Minister's New Economic Programme.

Steps are being taken for the formation of the National Consumer Protection Council under the chairmanship of the Union Minister of Industry and Civil Supplies to promote and develop consumer movement throughout the country. The Council will inform itself fully about consumers' problems, collect and disseminate information relating to consumer matters, assist the state governments in development of consumer movement, examine consumer grievances and initiate remedial action and promote equitable distribution of mass consumption commodities at fair prices.

Legal Measures

In the complex economic system prevailing today, it is widely realised that legislative protection is necessary to safeguard the interests of consumers. The country has taken various measures to achieve this objective.

The main legislation governing the production, procurement and distribution of essential commodities is the Essential Commodities Act, 1955. This Act was amended in 1974 to ensure quicker and more effective action against the anti-social activities of profiteers, blackmarketeers and hoarders.

State governments have been taking effective action under the Essential Commodities Act, Defence of India Rules and Maintenance of Internal Security Act against hoarders and profiteers. Over 26,219 offenders were prosecuted during 1974 for such offences, of whom 14,494 were convicted. Many were sentenced to imprisonment for terms ranging from 3 to 5 years. The number of summary trials registered an increase to 22,595 in 1974 as compared to 2,500 in 1973. Immediately after the promulgation of Emergency, state/union territory administrations were advised to take deterrent action against hoarders, blackmarketeers, profiteers and other anti-social elements. The administrations enforced orders relating to display of prices and stocks by dealers in respect of essential commodities and items of mass consumption. Orders were also enforced by the state governments to prevent wastage of food specially cereals at social functions. Catering establishments were also required to display tariffs for meals. By the end of December 1975, over 11,550 persons were arrested since promulgation of Emergency for violation of Essential Commodities Act.

To safeguard consumer interest against underweighing and misleading packaging of goods, amendments to the Standards of Weights and Measures Act, 1956 have been introduced in Parliament. The Government have banned forward trade in oilseeds in order to curb speculation. The enforcement unit of the Forward Markets Commission has intensified vigilance and assisted in conducting several raids against illegal forward trading in oil-seeds, oil, silver, jute, jute goods etc particularly after the promulgation of Emergency. By the end of 1975, 67 raids were conducted in various parts of the country covering 162 firms. Of these 34 raids involving 85 firms were conducted after the promulgation of Emergency, in which 161 persons were arrested.

Under the Monopolies and Restrictive Trade Practices Act, 1969, an inquiry into restrictive trade practices can be made by the Monopolies and Restrictive Trade Practices Commission upon receiving a complaint from any trade or consumer association having a membership of 25 or more consumers. This is a valuable right which the consumers can exercise with a view to removing artificial shortages, manipulated high prices of essential commodities, deterioration in quality of goods, etc.

In the wake of the national Emergency proclaimed in June 1975, Government made it obligatory for traders to display prices and stocks of essential commodities and items of mass consumption. Catering establishments have also been advised to display tariffs. An order under the Defence of India Rules provides that from 2 October 1975 packed commodities, including manufactured goods, have to prominently display on the packages the identity of the commodity, the weight or measure, the date of packaging and the sale price.

Standards of Weights and Measures

The Directorate of Weights and Measures in the Ministry of Industry and Civil Supplies is responsible for establishing standards of weights and measures, based on the International System of Units (SI). The day-to-day enforcement is done by the states. The Directorate has prepared model enforcement acts and rules for adoption by the states. The state laws on weights and measures conform substantially to these models.

A Weights and Measures (Law Revision) Committee had been set up by the Government of India to revise the central law relating to weights and measures and bring it in line with international recommendations and practices. A comprehensive Bill has been introduced in Parliament incorporating the recommendations of the Committee. It contains various provisions to protect the consumers from fraudulent weighing and measuring practices.

The Packaged Commodities (Regulation) Order 1975 was prepared as a measure of consumer protection. It was provided that the Order will be progressively implemented from 2 October 1975. Its primary objective is to apprise the consumer of the contents, weights, price, month of manufacture and name of manufacturers of several packaged commodities for retail sale.

The Indian Institute of Legal Metrology at Ranchi imparts training to personnel of departments of weights and measures of the states and union territories. Nominees of foreign governments also get training in metric system at the Institute.

The National Physical Laboratory, New Delhi, is the custodian of the national prototype of the kilogram, metre and other national standards. The Government of India Mint, Bombay, is responsible for the manufacture of reference, secondary and working standards. The Mint has manufactured over 1,200 sets of working standard weights and measures for the use of inspectors of weights and measures.

Trade Marks

The Trade Marks Registry is a statutory organisation set up under the Trade and Merchandise Marks Act, 1958. The Controller General of Patents, Designs and Trade Marks is the Registrar of Trade Marks. The Head office of the Registry is at Bombay. There are three branches of the Registry, one each at Calcutta, Madras and New Delhi. During 1975, 2,285 trade marks were registered, 7,239 registrations were renewed and 55 registered users were recorded.

Under the Foreign Exchange Regulation Act, 1973, foreign companies or Indian companies with more than 40 per cent non-resident interest are not allowed to permit any trade mark to be used by any person of the company for any direct or indirect consideration without the permission of the Reserve Bank of India. Permission granted to use any such trade mark before the Act came into force, has to be renewed.

Forward Markets Commission

The Forward Markets Commission regulates forward contracts and keeps a watch on price trends of a number of commodities including certain essential commodities. With assistance of the state police, the Enforcement Directorate of the Commission takes action against illegal forward trading.

The Commission permitted in 1974-75 forward trading only in jute-sacking, linseed, castor seed, pepper and turmeric under the auspices of recognised associations. Transferable and non-transferable delivery contracts were permitted in Bengal deshi cotton, raw jute, hessian and sacking.

COOPERATION

The idea of cooperation took concrete shape in India for the first time in 1904 when the Cooperative Credit Societies Act—a measure designed to combat rural indebtedness and provide for credit societies—was passed. Since then the cooperative movement has made progress[1] specially in the fields of agricultural credit, supply of farm inputs, processing and marketing. There are over 3 lakh cooperatives in the country and of these about 66 per cent are meant for servicing agriculture. According to an assessment, about 33 crore persons out of the total population of 55.8 crores were being served by the cooperative movement by 30 June 1972.

The emphasis in the Fourth Plan was on agricultural and consumers' cooperatives. In the Fifth Plan, the objective is to consolidate and strengthen the net-work of agricultural cooperatives in aid of sustained agricultural development, making consumers' cooperatives more viable, correcting regional imbalances, and focussing the activities of the cooperatives more and more on small and marginal farmers and weaker sections of the population.

In October 1974, the Department of Civil Supplies and Cooperation was created in the Ministry of Industry and Civil Supplies. The primary objective is to co-ordinate and assist multi-pronged action at state government levels and the union ministries to ensure the production and distribution of essential commodities and to combat inflation.

The activities of the Department were geared to implementation of the 20-Point Economic Programme. The Department is specially concerned with (i) measures for price stability, availability and distribution of essential commodities; (ii) supplies of essential commodities to students' hostels in colleges and universities; and (iii) distribution of controlled cloth. On each of these items significant progress has been recorded since Emergency.

One of the primary objectives of Government policy is not only to increase the production of essential consumer goods, but also to make them available to people at reasonable prices. The strategy adopted for this purpose is two-fold, *viz*, expansion and streamlining of the public distribution system and development of cooperatives for distribution of consumer articles. There are nearly 66,000 cooperative retail outlets for distribution of consumer goods in urban and rural areas. One of the major items handled by cooperatives is controlled cloth. Another development since the Emergency has been the extension of cooperative activities to serve the student community in the hostels of universities and degree colleges. Cooperatives are supplying essential consumer goods to about 3,000 hostels covering nearly 2.4 lakh students.

To broaden the financial base of consumer cooperatives, the central government provided during 1975-76, special assistance of Rs 4.55 crores to the state governments for contributing to the share capital of consumer cooperatives. The National Cooperative Development Corporation has also formulated a scheme for assisting expansion of consumer cooperative activities in rural areas through marketing and service cooperatives.

In the context of a national pattern, which is being evolved, the system of workers' participation in management is being introduced

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[1] For fuller account of the growth of the cooperative movement, see chapter XXII "India 1962"

in large cooperative industrial units. Special cooperative programmes directed to increasing employment and income opportunities to vulnerable sections have been evolved and are being implemented. The National Cooperative Development Corporation has also extended its activities to cover cooperative programmes for weaker sections.

While the overall progress of cooperative movement appears striking, there are wide regional disparities. The level of development of agricultural cooperatives is not uniform in all states. A number of schemes have been evolved with financial assistance from the central government for accelerating the growth of agricultural cooperatives in the cooperatively underdeveloped states.

The value of agricultural produce handled by the cooperatives increased from about Rs 175 crores in 1961-62 to about Rs 1,215 crores in 1974-75. During the same period the value of chemical fertilizers distributed by the cooperatives increased from Rs 32 crores to Rs 617 crores in 1974-75. The share of cooperatives in the total production of sugar rose from 1.5 per cent in 1955-56 to 44 per cent in 1974-75. It is expected to go up to 50 per cent by the end of the Fifth Plan.

Growth of Cooperatives

The salient features and operational dimensions of the cooperative movement in India for selected years between 1950-51 and 1972-73 are given in Table 16.1.

A study of the data in the Table shows that between 1950-51 and 1972-73 the membership of primary societies increased by more than four times, the share capital of all types of cooperatives increased by more than 23 times and the working capital by more than 31 times.

TABLE 16.1
GROWTH OF COOPERATIVES

	1950-51	1955-56	1960-61	1968-69	1969-70	1970-71	1971-72	1972-73
No. of Societies (lakhs)	1.8	2.4	3.3	3.3	3.2	3.2	3.2	3.3
Membership of primary societies (lakhs)	137	176	342	585	588	591	614	678
Share capital (Rs crores)	45	77	222	663	753	851	944	1,051
Working capital (Rs crores)	276	469	1,312	4,473	5,154	6,810	7,695	8,575

Loans

The volume of loan operations of the cooperatives recorded a significant increase in the Fourth Plan period. Table 16.2 shows the figures of loans granted during the period.

TABLE 16.2
LOAN OPERATIONS OF THE COOPERATIVES

(*Rs. crores*)

Loan	1969-70	1970-71	1971-72	1972-73	1973-74
Short-term	489.66	519.34	540.94	611.54	689.31
Medium-term	52.34	58.54	73.59	163.35	71.15
Long-term	155.48	170.36	154.44	181.78	158.09

Cooperatives are expected to disburse over Rs 1,300 crores as production credit as against the estimated requirements of Rs 3,000 crores for the country as a whole in 1978-79, the last year of the Fifth Plan. Besides, Rs 350 crores have been visualised as medium term loan for the Plan period. For 1974-75, the target was Rs 807 crores as short term and Rs 58 crores as medium term credit.

Agricultural Credit

The policy in the field of agricultural credit continues to be progressive institutionalisation of agricultural credit under a "multi-agency app-

roach." Several measures have been taken in this direction. During the cooperative year 1973-74 (ending 30 June 1974), short and medium term credits advanced by primary agricultural credit societies were Rs 760.46 crores and are estimated to be Rs 854 crores in 1974-75. In the sphere of long-term development finance for agriculture, the land development banks constituted the main source for provision of credit. In 1960-61, Cooperative Land Development Banks issued loans aggregating Rs 12 crores and in 1973-74 Rs 158 crores. It is estimated that the amount stood at Rs 184 crores in 1974-75.

Commercial banks also continue to play an important role in providing agricultural credit to the farmers. Their direct financing for agriculture stood at Rs 417.64 crores as on 31 March 1974. Special emphasis continues to be laid on institutional credit for the weaker sections. The loaning policies and procedures of credit institutions have been simplified and credit made more production-oriented than

TABLE 16.3
STATE COOPERATIVE BANKS

	1951-52	1972-73	1973-74	1974-75 Provisional
Number of banks	16	26	26	25
Membership	23,272	19,574	20,248[1]	NA
Share capital (Rs lakhs)	190	5,093	5,454	5,750
Statutory and other reserves (Rs lakhs)	236	6,501	7,406	NA
Deposits (Rs lakhs)	2,118	40,608	48,867	53,789
Other borrowings (Rs lakhs)	1,127	29,984	29,043	NA
Working capital (Rs lakhs)	3,672	84,877	94,200	NA
Loans advanced (Rs lakhs)	5,527	1,02,320	1,16,191	1,88,528
Loans outstanding (Rs lakhs)	2,001	63,506	70,623	NA
Loans overdue (Rs lakhs)	322	4,190	6,336[2]	NA

TABLE 16.4
CENTRAL COOPERATIVE BANKS

	1951-52	1972-73	1973-74	1974-75 Provisional
Number of banks	509	344	341	346
Membership	2,31,318	3,02,538	3,06,331[1]	NA
Share capital (Rs lakhs)	462	17,629	19,268	21,072
Statutory and other reserves (Rs lakhs)	519	7,797	8,794	NA
Deposits (Rs lakhs)	3,823	64,664	71,860	79,543
Other borrowings (Rs lakhs)	1,207	43,811	50,898	NA
Working capital (Rs lakhs)	6,011	1,41,184	1,59,475	NA
Loans advanced (Rs lakhs)	10,564	1,24,554	1,24,852	1,69,352
Loans outstanding (Rs lakhs)	3,591	1,02,832	1,16,280	NA
Loans overdue (Rs lakhs)	487	30,038	37,555	NA

TABLE 16.5
PRIMARY AGRICULTURAL CREDIT SOCIETIES

	1951-52	1972-73	1973-74	1974-75
Number of societies	1,07,925	1,54,670	1,53,808	1,55,088
Membership (lakhs)	47.77	335.28	349.56	361.83
Share capital (Rs crores)	8.92	247.62	271.06	295.87
Deposits (Rs crores)	4.39	84.31	89.28	99.30
Working capital (Rs crores)	45.22	1,461.92	1,580.28	1,646.38
Loans advanced (gross) (Rs crores)	24.21	774.89	760.46	853.54
Loans outstanding (Rs crores)	33.66	978.77	1,054.97	1,160.05
Loans overdue (Rs crores)	8.52	368.19	443.24	504.69
Average per Society				
Membership	44	217	227	233
Share capital (Rs)	827	16,010	17,623	19,078
Deposits (Rs)	408	5,451	5,805	6,403
Loans advanced (Rs)	2,243	50,099	49,443	55,036

[1] Includes unrenewed cash credits and overdrafts. [2] Includes nominal membership.
NA—Not available

security-oriented. During the years 1969-70 and 1970-71, about $\frac{1}{3}$ of credit advanced by primary agricultural cooperative credit societies was for cultivators with land holdings of less than 2 hectares. The Credit Guarantee Corporation which started functioning from 1 April 1971 operates a scheme of guaranteeing losses up to 75 per cent subject to certain limits in respect of loans given by commercial banks.

One salient factor in agricultural credit policy is the emphasis laid on providing credit to small farmers and weaker sections of the population. At least 20 per cent of the outstanding borrowings of the central cooperative banks from the concerned state cooperative banks shall be earmarked for financing small or marginal farmers. Concessions are also available to small, marginal and economically weak farmers. Provision of short-term credit is also extended to unregistered tenants and sharecroppers, subject to certain safeguards.

The agricultural credit cooperatives have three-tier credit structure, consisting of the cooperative banks at the state level, central cooperative banks at the district level and primary agricultural credit societies at the village level. They provide short-term and medium-term agricultural credit.

The number, membership and financial operations of the state cooperative banks, central cooperative banks and primary agricultural credit societies for selected years between 1951-52 and 1974-75 are indicated in Tables 16.3, 16.4 and 16.5.

At the end of 1973-74, out of about 1.54 lakhs primary agricultural credit societies, the active ones numbered 1.35 lakhs and covered over 95 per cent of the villages and 39 per cent of the rural population.

Short and Medium Credit

For short and medium term credit there were nearly 1.54 lakh primary agricultural credit societies in India at the end of June 1974, with a membership of about 3.50 crores and covering 95 per cent of the villages and 41 per cent of the rural population. These societies were affiliated to 342 district central co-operative banks, which in turn were affiliated to 26 state cooperative banks. The loans advanced by the central cooperative banks stood at Rs 1,248.52 crores and by the state cooperative banks at Rs 1,161.91 crores in 1973-74.

At the end of June 1974, the total deposits of primary agricultural credit societies stood at Rs 89.28 crores, deposits of state cooperative banks at Rs 488.67 crores and deposits with the central cooperative banks at Rs 718.60 crores.

Long-term Credit

The structure for providing long-term credit consists of 19 central cooperative land development banks with about 1,442 primaries and branches. With total disbursements amounting to over Rs 1,400 crores, these banks are the most important institutional agencies for meeting long-term credit needs of the farmers for land development, minor irrigation, purchase of tractors, power tillers and such other purposes.

The cooperative land development banks have a two-tier structure—central land development banks at the state level and primary land development banks at the block, tehsil, sub-division and district levels. In a few states like Bihar, Gujarat, Jammu and Kashmir, Maharashtra and Uttar Pradesh, unitary structure at the state level operates through its branches in districts and tehsils. During 1973-74 these banks advanced to individuals Rs 158.09 crores and the outstanding loans stood at Rs 914.53 crores. These banks raise their resources mainly

by floatation of ordinary debentures in the country. Special debentures are also floated by these banks for which resources are provided by the state governments and the Agricultural Refinance Corporation. During 1973-74 ordinary debentures worth Rs 74.97 crores and special debentures valued at Rs 83.30 crores were floated.

Credit for Small Farmers

Two schemes—the Small Farmers Development Agencies (SFDA) and Marginal Farmers and Agricultural Labourers Development Agencies (MFAL)—were introduced during the Fourth Plan for generating employment and additional income in the rural areas. These agencies function as coordinators between the participants, small and marginal farmers and agricultural labourers, credit institutions, development departments and extension agencies. Financial assistance to identified small and marginal farmers is provided in the shape of risk fund and managerial subsidy to strengthen the cooperative credit structure.

During the Fourth Plan, the central government set up SFDA in 46 districts to identify the problems and needs of small farmers in their areas, prepare appropriate programmes and implement them with the necessary inputs, services and credit. The existing credit institutions are being utilised for this purpose. To stimulate the flow of credit to small farmers these agencies provide grants to central cooperative banks, primary credit societies and cooperative land development banks for building up special risk funds. Special assistance to managerial and supervisory staff is also provided by these agencies. In addition, the central government have set up 41 projects for marginal farmers and agricultural labourers. These projects lay special stress on the provision of supplementary occupations and other employment opportunities through rural works. Under the programme, assistance is provided to individual participants through subsidy of 25 per cent to small farmers and 33⅓ per cent to marginal farmers on capital investment in such works as minor irrigation, land development and soil conservation.

The SFDA and MFAL projects started functioning on a significant scale only from the cooperative year 1971-72. By the end of March 1975, 87 SFDA and MFAL had identified 19.90 lakh small farmers, 21.46 lakh marginal farmers and 4.68 lakh agricultural labourers; of these 23.28 lakhs were brought within the cooperative fold. Of the identified farmers, 16.50 lakhs have benefited so far under the programmes of improved agricultural practices, and 9.97 lakhs under other programmes. During the project period up to March 1975, a sum of Rs 61.14 crores was released to these agencies; of this Rs 57.16 crores had been utilised.

During the Fifth Plan, the number of these projects has been increased to 160, including the existing 87 projects. All the projects will be composite, covering small and marginal farmers and agricultural labourers. The parameters for identification of small and marginal farmers have also been reduced to 2.02 hectares of dry land in the case of small farmers and 1.01 hectares of dry land in the case of marginal farmers. In the new projects, the emphasis will be on crop husbandry programmes which will include intensive agriculture, multiple cropping, introduction of high-yielding varieties, development of irrigation, soil conservation, land shaping and land development, with special emphasis on dry farming practices and water harvesting measures.

Supply of Inputs

Cooperatives have developed a net-work of about 40,000 retail outlets

for distribution of fertilizers. Nearly 60 per cent of the fertilizers consumed in India are distributed by cooperatives. The value of fertilizers handled by cooperatives during 1974-75 was of the order of Rs 617 crores as against Rs 32 crores in 1961-62. The value of seeds, pesticides, implements and other agricultural requisites distributed by cooperatives during 1974-75 is estimated at Rs 98 crores.

Other Credit Agencies

A number of other agencies also provide credit to agriculturists for various purposes.

The Agricultural Refinance Corporation (ARC) was set up in 1963 for granting medium and long-term credit for the development of agriculture, animal husbandry, dairy farming, pisciculture and poultry farming. It is a refinancing agency providing credit to projects financed by cooperative credit institutions and commercial banks.

Assistance from ARC is availble for financing (i) reclamation and preparation of land; (ii) development of special crops such as arecanut, coconut, cashewnut, cardamom, coffee, tea and rubber; (iii) development of mechanised farming, use of electricity through tube-wells and pumpsets; and (iv) development of animal husbandry, dairy farming, pisciculture (including cooperative fisheries) and poultry farming.

Up to 31 March 1975, ARC had sanctioned 1,805 development schemes costing about Rs 872.78 crores. The schemes regarding development of minor irrigation accounted for Rs 631.98 crores, land reclamation Rs 86.31 crores and other schemes Rs 154.49 crores.

The Rural Electrification Corporation was set up in 1969 as an autonomous body under the then Ministry of Irrigation and Power to promote and finance the setting up of rural electric cooperatives[1].

The National Cooperative Development Corporation (NCDC) was established in 1963 under an Act of Parliament for planning and promoting programmes for the production, processing, storage and marketing of agricultural produce and other notified commodities through cooperative societies. NCDC's activities now cover Jammu and Kashmir also. The NCDC Act has been amended to enlarge the scope of its activities to cover specifically dairy, poultry and fishery programmes and programmes for tribals through cooperatives.

Non-Agricultural Credit Societies

Urban credit is provided by non-agricultural credit societies which include urban banks, employees' credit societies and thrift societies. Deposits with these institutions amounted to Rs. 477.20 crores as on 30 June 1975 as against Rs 421.3 crores at the end of June 1973. Loans and advances made by them totalled Rs. 781.40 crores in 1973-74.

INDUSTRIAL COOPERATIVES

Village and small industries cooperatives account for over 90 per cent of the industrial societies. There were 12,587 weavers' societies with a membership of 11.75 lakhs as on 30 June 1973.

The National Federation of Industrial Cooperatives was registered in 1966 to develop the export and wholesale marketing of products of industrial cooperatives. It has set up branches at New Delhi, Agra and Ludhiana.

Marketing and Processing Cooperatives

The cooperative marketing structure consists of about 2,800 primary cooperative marketing societies covering all important agricultural markets in the country, 20 state cooperative marketing federations and

[1]For details on rural electrification, see chapter 'Energy'.

one National Agricultural Cooperative Marketing Federation. The total value of agricultural produce handled by such cooperatives increased from Rs 175 crores in 1961-62 to over Rs 580 crores in 1968-69 and to about Rs1,215 crores in 1974-75. The value of foodgrains handled by cooperatives increased from about Rs 220 crores in 1968-69 to about Rs 355 crores in 1973-74. In 1974-75, the Federation's turnover stood at over Rs 58 crores as against Rs 7.64 crores in 1970-71.

The structure of processing units established in the cooperative sector conforms to two distinct patterns, namely, units established by independent processing societies and units established as adjuncts to cooperative marketing societies. Under the first category fall the larger units such as sugar factories, solvent extraction plants and spinning mills. Medium and small units such as rice mills, oil mills, jute baling units, cotton ginning and pressing units mostly fall under the second category. Of the 1,962 processing units organised as at the end of 1974-75 in the cooperative sector 1,616 units were installed of which over 335 units are large and medium-sized industries like sugar and vanaspati. Over 1,250 units were established as adjuncts to marketing societies. The cooperative sugar factories have formed themselves into 8 state federations and a national federation. Ninety one sugar factories were in production during 1974-75. They produced 20.9 lakh tonnes of sugar accounting for nearly 43.6 per cent of the country's total production of sugar. At the national level, the National Federation of Cooperative Sugar Factories renders advice and maintains a Technical Cell. It has helped in organising Heavy Engineering Cooperatives Ltd. for the manufacture of sugar factories in the cooperative sector. An outlay of Rs. 1 crore has been made in the Fifth Plan for assisting this cooperative. In the field of cotton ginning and pressing, cooperatives handle nearly 15 per cent of the total cotton production in the country.

Storage

The National Cooperative Development Corporation is responsible for planning, promoting and financing the programme of augmenting storage capacity of cooperatives at various levels. A storage capacity of 45 lakh tonnes was available with the cooperatives in 1974-75 as against a capacity of 8 lakh tonnes in 1960-61. By the end of March 1974, as many as 14,944 rural and 4,056 marketing godowns with a storage capacity of 32.38 lakh tonnes had been constructed. Besides, a storage capacity of 5.43 lakh tonnes was created by constructing 285 godowns with the assistance of the Agricultural Refinance Corporation. As for cold storage, 128 cooperative units with a total capacity of 2.04 lakh tonnes were organised. Of these, 81 units with a storage capacity of 1.74 lakh tonnes were in operation in 1974.

To help farmers, cooperatives have diversified their activities in recent years to cover new lines of business like production of granular fertilizers, production, processing and distribution of seeds, manufacture and distribution of improved agricultural implements and setting up of agro-service centres. The cooperatives handled Rs 617 crores worth of fertilizers during 1974-75.

IFFCO

The Indian Farmers' Fertilizers Cooperative (IFFCO) is a multi-unit cooperative society owned by cooperatives in 10 states and the Government of India. It has set up ammonia and urea plants at Kalol (Gujarat) and NPK complex fertilizer plant at Kandla (Gujarat).

The ammonia plant is designed to produce over 3 lakh tonnes of

ammonia yearly. The annual capacity of the urea plant is 3.96 lakh tonnes annually. The Kandla fertilizer complex has an output of 3.75 lakh tonnes of NPK per annum. IFFCO is to set up another nitrogenous fertilizer plant at Phulpur (near Allahabad) in Uttar Pradesh. The project will consist of an ammonia plant with a capacity of 2.97 lakh tonnes annually and a urea plant with a capacity of 4.95 lakh tonnes per annum.

NAFED

The National Agricultural Cooperative Marketing Federation (NAFED), which is made up of all cooperative marketing societies in the country, promotes inter-state and export trade of farm products. It exports commodities like pulses, chillies, ginger, groundnut meal, garlic and cardamom to Australia, Belgium, Canada, Fiji, Hongkong, Japan, Malaysia, Mauritius, Singapore, Sri Lanka, UK, USA and a number of African, West Asian and Gulf countries.

Cooperatives for Weaker Sections

Cooperatives for the weaker sections of the society provide increased employment and income opportunities to different sections of the community like small and marginal farmers and fishermen. Functional cooperatives for programmes, like dairy and cooperative farming, mainly relate to the service of weaker sections.

Dairy

On 31 December 1975 out of a total of 168 dairy plants in operation in India, 41 are in the cooperative sector. On 30 June 1975, there were 19,367 primary milk supply cooperatives with a membership of 15.49 lakhs. During 1974-75 these cooperatives handled products valued at Rs 87 crores. The primary milk cooperatives are federated into 154 unions. A National Federation of Dairy Cooperatives was set up in 1970.

Fishery

The organisational structure of fishery cooperatives normally consists of primary fishery cooperatives at the base. A super-structure of federation of primary fishery cooperatives has also been build up. This consists of district and central federations and state-level federations. On 30 June 1975, there were nearly 46,000 primary fishermen cooperatives with a membership of 4.86 lakhs. The total value of fish handled by these primaries during 1974-75 was of the order of Rs 8.39 crores. Attempts are being made to develop cooperative fishery programme for intensification of fish production on a project basis.

Poultry Cooperatives

By the end of June 1975, there were over 1,100 primary poultry cooperatives with a membership of 37,964. These handled poultry products valued at Rs 3.85 crores during 1974-75.

Multi-purpose Tribal Cooperatives

As part of the programme of economic development of tribals, primary cooperatives in tribal areas are being reorganised to enable them to function as multi-purpose societies providing short, medium and long-term credit to the tribals, undertaking collection and marketing of agricultural and minor forest produce, arranging for supply of agricultural inputs as well as essential consumer goods. State level cooperative tribal development corporations/federations have so far been established in Andhra Pradesh, Bihar, Madhya Pradesh, Maharashtra and Orissa.

Joint Farming

As on 30 June 1974, there were 4,985 joint farming societies with a membership of about 1,22,000 and commanding an area of 3.2 lakh

hectares. On that date, the number of collective farming societies was 4,740 with a membership of 1,48,000 and an area of 3.1 lakh hectares.

Labour

Labour contract and construction cooperatives have been organised with a view to providing employment at reasonable wages to their members and preventing their exploitation by the contractors. On 30 June 1975, there were 9,147 labour cooperatives including forest labour cooperatives with a membership of 6 lakhs. There are 62 district-level labour cooperative unions in 12 states, besides state-level cooperative federations in about 6 states. There is a proposal to organise a national level federation of labour cooperatives. The value of works executed by labour cooperatives during 1972-73 was of the order of Rs 18.5 crores. It increased to Rs 24.50 crores in 1973-74 and to Rs 33.06 crores in 1974-75.

Housing

There were 23,626 primary housing cooperatives in the country with a membership of 17.7 lakhs at the end of June 1974. These cooperatives constructed about 5 lakh tenements, including independent houses, and had an equal number under construction.

The number, membership and working capital of primary non-credit societies during 1972-73 are shown in Table 16.6.

TABLE 16.6 NUMBER, MEMBERSHIP AND WORKING CAPITAL OF OF PRIMARY NON-CREDIT COOPERATIVE SOCIETIES

	Number	Membership	Working capital (Rs lakhs)
General purpose marketing societies	2,691	26,51,409	18,333
Specialized societies	577	3,48,571	2,275
Milk supply societies	14,682	12,34,730	2,550
Livestock/Livestock products societies	1,882	69,271	390
Farming societies	9,454	2,56,980	1,949
Irrigation societies	4,384	1,55,189	1,407
Other agricultural societies	9,514	5,91,086	4,601
Sugar factories	149	6,35,008	43,998
Cotton ginning processing societies	187	1,49,774	1,937
Other processing societies	1,077	1,99,071	1,472
Weavers' societies	12,460	11,55,536	7,349
Spinning mills	61	71,125	8,320
Other industrial societies	34,638	17,17,301	6,299
Industrial estates	170	14,336	2,047
Consumers' stores	13,400	35,23,716	4,401
Housing societies	22,514	14,09,336	51,871
Fisheries societies	4,551	4,77,912	1,291
Other non-agricultural societies	6,556	19,17,817	2,490
Cold storages	46	8,582	232
Labour contract and construction societies	6,425	3,77,519	1,423
Forest labourers' societies	1,587	1,75,627	1,594
Transport societies	1,163	71,004	1,114
General insurance societies	5	14,697	692
TOTAL	1,48,173	1,71,71,597	1,68,045

Training and Research

A well-organised infra-structure for training of institutional and Government employees engaged in cooperatives is available in India. The training is administered and co-ordinated by the Committee for Cooperative Training, constituted jointly by the Government of India and the National Cooperative Union of India. The Committee maintains the Vaikunth Mehta National Institute of Cooperative Management at Pune. It conducts in-service training courses for senior and key personnel of cooperative institutions and state govern-

ments. During 1974-75 about 625 personnel of the senior category and 3,350 personnel of the intermediate category were trained.

Training of junior personnel is arranged through 65 junior level training centres which are maintained by state governments and state cooperative unions.

National-level Cooperative Federations

A major development over the past one decade has been the emergence of national cooperative federations which have added a new dimension to the cooperative infra-structure. With National Cooperative Union of India at the apex, the other national-level cooperative organisations include the National Agricultural Cooperative Marketing Federation, the All-India State Cooperative Banks Federation, the National Federation of Cooperative Sugar Factories, the National Cooperative Land Development Banks Federation, the National Cooperative Consumers' Federation, the National Federation of Industrial Cooperatives, the All India Federation of Cooperative Spinning Mills, the National Cooperative Housing Federation and the National Cooperative Dairy Federation of India.

Other Cooperatives

Consumer Cooperatives

There is a countrywide network of consumer cooperatives to help in the fair and equitable distribution of consumer goods. By the end of 1975, there were about 424 central and wholesale consumer cooperative stores, about 14,275 primary consumer cooperatives, 14 State Federations of Consumer Cooperatives and the National Cooperative Consumers' Federation at the apex. The central and wholesale cooperatives had also set up about 2,640 branches and were running 171 department stores (Super Bazars). In the Fifth Plan, a pivotal role is envisaged for consumer cooperatives in the distribution of essential consumer goods and of articles of mass consumption. The Plan provides for an outlay of Rs 10.50 crores under the centrally-sponsored and central sector schemes. An equivalent outlay has also been provided for under the state sector of the Plan. The Plan outlay in 1975-76 for consumer cooperatives was stepped up to over Rs 5.5 crores.

NCCF

The National Cooperative Consumers' Federation (NCCF), which is the apex organisation of consumer cooperatives at the national level, has made significant progress in recent years. It undertakes commercial as well as promotional activities. Its annual business increased to Rs 57.36 crores (estimated) in 1974-75 from Rs 28.56 crores in 1973-74 and Rs 11.43 crores in 1972-73. The Federation has been recognised as the procuring and coordinating agency at the national level for sale of controlled cloth under the statutory scheme introduced in November 1972. It has also set up a consultancy and promotional cell to provide expert guidance and advice in various aspects of operation and management of consumer cooperatives. A team of ILO experts is attached to this cell.

Consumer cooperatives in major cities and towns with a population of 50,000 and more are being strengthened and expanded. In urban areas, consumer cooperatives have about 17,500 retail outlets. In rural areas, about 53,000 cooperative retail outlets are distributing consumer articles. These cooperatives are managing about 66,000 fair price shops. The value of consumer goods distributed by cooperatives in the urban and rural areas in 1974-75 is estimated to be Rs 400 crores in each of the areas.

Supply to Students in Hostels

This scheme, circulated to state governments and union territory administrations in July 1975, provides for supply of essential consumer articles such as foodgrains, pulses, spices, vanaspati and other edible oils, tea and coffee, sugar and the like through consumer cooperative institutions to students' hostels and approved lodgings at preferential/concessional rates. This programme is under implementation in all the states and union territories. The reports from the states indicate that about 50 per cent of the students in hostels and approved lodgings have been covered so far. Assam, Haryana, Himachal Pradesh, Tripura, Manipur, Meghalaya, Mizoram, Nagaland, Andaman and Nicobar Islands, Arunachal Pradesh, Chandigarh, Orissa, Goa, Daman and Diu, Lakshadweep, Jammu and Kashmir and Pondicherry have reported full coverage of students in university/college hostels and approved lodgings.

Distribution of Controlled Cloth

One of the items included in the 20-Point Economic Programme relates to augmentation of the arrangements for distribution of controlled cloth both in urban and rural areas.

Between 1964 and 1972, while there was statutory control on production and prices of certain varieties of cloth, there was no control on distribution as such. This led to serious malpractices. Consequently, with effect from October 1972, the main responsibility for distribution of controlled cloth was entrusted to the consumer cooperatives. With the entry of cooperatives, a programme to increase the number of retail outlets in urban and rural areas was taken in hand. The National Cooperative Consumers' Federation introduced a Freight Equalisation Fund to ensure that controlled cloth reaches all places including far-flung areas.

The programme of opening more retail outlets has been intensified during Emergency. As a result the total number of retail outlets for distribution of controlled cloth was increased from 29,324 in June 1975 to 46,694 in December 1975. Of these about 80 per cent are located in rural areas.

An amount of Rs 2.34 crores has been provided to cooperatives as margin money for raising bank finances for distribution of controlled cloth. The offtake of controlled cloth by cooperatives during July 1975 to January 1976 was 1,96,258 bales.

17 ENERGY

The worldwide energy crisis following the decision taken by the Gulf oil producing countries at Kuwait on 15 October 1973 to raise the price of crude oil, had its impact on India also which, like many other countries of the world, was depending mostly on imported crude oil for meeting its requirements. The imports of crude oil and petroleum products in 1974-75 was estimated to be of the order of 139 lakh tonnes and 27 lakh tonnes respectively involving a foreign exchange outgo of about Rs 1,130 crores as against 130.90 lakh tonnes of crude and 38.30 lakh tonnes of petroleum products costing Rs 341.41 crores in 1973.

The crisis called for giving top priority to developing national resources in the fields of oil exploration and building up of refineries, so as to aim at self-sufficiency. As a policy it was also decided to curb consumption of petroleum products for non-essential uses.

The situation called for taking a total view of energy resources. While the Ministry of Petroleum and Chemicals began to take a new look at the prospects of oil exploration and production, oil refining and distribution, the Ministry of Irrigation and Power was bifurcated on 11 October 1974 and a new Ministry of Energy was created with two Departments, the Department of Power and the Department of Coal—to enable optimum development and utilisation of energy resources.

India is one of the few countries in the world with large reserves of coal although the rate of their exploitation has been rather slow. In 1972, the production of coal in the country accounted for only 3.4 per cent of the total world production. The main reason for slow rate of exploitation has been the lack of domestic demand which, in turn, was partly due to the easy availability of alternative sources of energy. In the context of changed energy situation, the need for stepping up the rate of coal production in the country during the Fifth Five Year Plan and beyond has become imperative. The majority of coal reserves in the country are of very high ash type of non-coking category. Power generation plants are now, therefore, based more and more on high ash coals.

Electric power being the most versatile and convenient form of energy, the demand for it is growing at a fast rate. The country's industrial progress as well as agricultural advancement are closely linked up with availability of power.

POWER

Development of electricity was initiated in India as early as 1900 with the commissioning of the hydro-electric power station at Shivasamudram in Karnataka. In spite of this early beginning and recognition all along that availability of cheap electricity was a prerequisite to trigger industrial and economic advancement, the progress was not impressive till 1947. The installed capacity was as low as 19 lakh kw and the development was mainly concentrated around urban centres.

Power generation programmes, however, made phenomenal progress with the advent of the Five Year Plans. During the First Plan (1951-56) construction of a number of major river valley projects

like Bhakra-Nangal, Damodar Valley, Hirakud and Chambal Valley was taken up and these projects resulted in stepping up food production and also power generation. At the end of the First Plan the generation capacity stood at 34.2 lakh kw.

The emphasis in the Second Plan was on the development of basic and heavy industries, and the related need to step up power generation. The installed capacity at the end of the Second Plan reached 57 lakh kw mark.

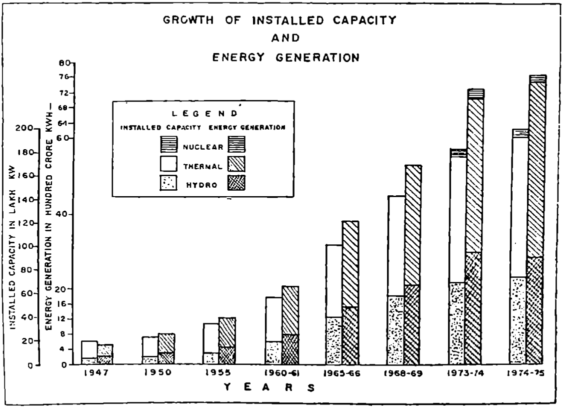
During the Third Plan the emphasis was on extending power supply to rural areas. A significant development in this phase was the emergence of inter-state grid system. The country was divided into five regions each with a regional electricity board, to promote integrated operation of the constituent power systems.

The three Annual Plans that followed the Third Plan aimed at consolidating the programmes initiated during the Third Plan.

The Fourth Plan envisaged the need for central participation in expansion of power generation programmes in strategic locations to enable equitable distribution and removal of imbalances. The progress during the period was substantial with installed capacity rising to 184.1 lakh kw comprising 69.7 lakh kw from hydro-electric projects and 108.2 lakh kw from thermal power projects and the balance of 6.2 lakh kw from nuclear plants.

Fifth Plan Targets

The Fifth Plan envisages increasing the installed generating capacity by about 165 lakh kw of which 64 lakh kw would be from hydro-electric power stations, 94 lakh kw from thermal and 7 lakh kw from nuclear power stations. This would increase the installed generating capacity in the country to about 350 lakh kw at the end of the Fifth Plan. During the first year of the Fifth Plan 17.20 lakh kw



capacity was added to the total generation capacity, 11.65 lakh kw was from thermal power plants and the balance from hydro-electric plants.

Table 17.1 shows the installed capacity and energy generated at the end of the Second, Third and Fourth Plans and at the end of the first year of the Fifth Plan.

TABLE 17.1
INSTALLED CAPACITY AND ENERGY GENERATED

(*in lakh kw*)

Sources of installed energy	1960-61	1965-66	1973-74	1974-75
Installed Energy Capacity	56.6	101.7	184.1	201.3
Hydro	19.2	41.0	69.7	75.2
Thermal	34.4	56.5	105.9	117.6
Diesel	3.0	4.2	2.3	2.3
Nuclear	—	—	6.2	6.2
Energy generated (lakh kwh)	2,01,200	3,68,250	7,27,530	7,57,040
Hydro	78,370	1,52,250	2,89,900	2,74,440
Thermal	1,19,150	2,12,760	4,12,510	4,60,200
Diesel	3,680	3,240	1,160	800
Nuclear	—	—	23,960	21,600

Investment

The investment in the power sector at the commencement of the Fourth Plan was Rs 3,629 crores. An additional sum of Rs 2,983 was spent during the Plan period bringing the total investment, at the end of March 1974, to Rs 6,612 crores. The Fifth Five Year Plan envisages an investment of Rs 6,190 crores on the power sector comprising: Generation (*Rs crores*) 3,323.81; Transmission and distribution 1,634.27; Rural electrification 1,098.24; Miscellaneous 133.68.

The total energy generated in different states from various sources, namely, hydro, thermal and nuclear during 1974-75 is given in Table 17.2.

TABLE 17.2
ENERGY GENERATED STATE-WISE BREAK-UP

Name of State/System	Generation in 1974-75			
	Hydro (mu)	Thermal (mu)	Nuclear (mu)	Total (mu)
1. Andhra Pradesh	977	2727	—	3704
2. Assam/Meghalaya	219	329	—	548
3. Bihar	6	2054	—	2060
4. Gujarat	482	5182	—	5664
5. Haryana	—	125	—	125
6. Himachal Pradesh	152	—	—	152
7. Jammu & Kashmir	273	19	—	292
8. Karnataka	4653	—	—	4653
9. Kerala	2659	—	—	2659
10. Madhya Pradesh	541	3388	—	3929
11. Maharashtra	5169	5785	1546	12500
12. Orissa	1338	855	—	2193
13. Punjab	487	137	—	624
14. Rajasthan	1198	—	739	1937
15. Uttar Pradesh	1573	5450	—	7023
16. Tamil Nadu	3877	3538	—	7415
17. West Bengal	86	4236	—	4322
18. Delhi	—	2665	—	2665
19. B.M.B.	3923	—	—	3923
20. D.V.C.	297	4169	—	4466
Total for the country	27910	40659	2285	70854

Pattern of Development

The pattern of power resources in the country has been changing from time to time depending on the availability of resources. At present

the states of Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala and Meghalaya depend primarily on hydro-electric power while Delhi, Bihar and West Bengal depend mainly on thermal power resources. Andhra Pradesh, Assam, Haryana, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh derive their power supply from both hydro and thermal sources.

About 95 per cent of the total installed capacity is accountable to hydro-power and coal-based thermal power stations. It was only in 1969 that a nuclear power station was commissioned. There are at present two nuclear power stations in operation in the country, one in Maharashtra (Tarapur) and the other in Rajasthan (Kotah). Their relative contribution is still meagre.

Organisation

The responsibilities of the central government in the field of power development and supply can be classified broadly under the following heads: legislation; formulation of policy; planning and coordination; arranging for funds, foreign exchange and scarce material; establishment of operation of regional grids; design and consultancy services for power generation schemes; rural electrification expansion; resolution of inter-state aspects relating to power generation and supply; cooperation with neighbouring countries in the field of power development; exploitation of non-controversial sources of energy other than nuclear power, and manufacture of equipment for power plants and power systems.

Among the statutory and autonomous bodies and the subordinate offices which discharge some of these responsibilities are: the Central Electricity Authority, the Damodar Valley Corporation, the Rural Electrification Corporation and the National Projects Construction Corporation.

Electricity Supply Act, 1948

The Electricity Supply Act of 1948 forms the basis of the administrative structure of the electricity supply system in the country. The Act provided for setting up of a Central Electricity Authority, with responsibility, *inter alia*, to develop a national power policy and to coordinate the activities of the various planning agencies. The Act also provided for setting up of the State Electricity Boards with responsibilities, *inter alia*, for preparing and carrying out schemes for designing power stations, for arranging transmission and supply.

Resources for Power Development

The main sources of power in the country are thermal, hydro and nuclear. Besides the conventional sources of power—hydro, thermal and nuclear, the Ministry of Energy is examining the prospects of development of power from non-conventional sources such as geothermal energy, solar energy, wind energy and tidal energy. Harnessing of these sources, however, requires considerable research and development efforts.

Sources of Hydro-electric Power

The present knowledge of availability of hydro-electric resources is based on a systematic survey carried out by the Central Water and Power Commission between 1953 and 1958. The survey aimed at estimation of the economically exploitable hydro-electric potential of the country. Detailed studies of each river-basin in the country were carried out with a view to identifying potential sites which could be considered capable of economic development for hydro-electric power. As many as 260 potential sites were located. The total

economically exploitable hydro-electric potential of the country was assessed as 25 lakh kw continuous, equivalent to an annual energy potential of 2,16,310 lakh kw.

Coal for Power

Coal based thermal stations contribute about 59 per cent of the electricity generation in the country and they are expected to play an important role in power generation in future.

It is proposed to initially establish, in a phased manner, one super thermal station each in the Northern, Western, Eastern and Southern regions.

Oil and Gas for Power

Use of oil and gas for power generation has so far been very limited. This is confined to a few thermal stations located close to the oil/gas wells and refineries and diesel and gas turbine stations. Out of the total oil used in the country only 10 per cent is used for power generation and the contribution of the stations which use oil and gas as primary fuel amounts to about 1 per cent of the total generation. In view of the present oil crisis, efforts are being made to convert thermal stations which are presently using oil and gas as primary fuel to the use of coal.

Nuclear Energy

Nuclear power generation was initiated in the country in 1969 with the commissioning of the nuclear power station at Tarapur with an installed capacity of 400 mw. The installed capacity of nuclear power plants at present is 620 mw.

Tidal Energy

Large tidal variations are known to occur along the west coast of India in the Gulf of Cambay and Gulf of Kutch and in the east coast in the estuary of the Hooghly. An expert panel appointed by the National Committee on Science and Technology has examined the possibilities of tidal power generation in the country. According to their report, the maximum developable power generation at the various sites in India is indicated in Table 17.3.

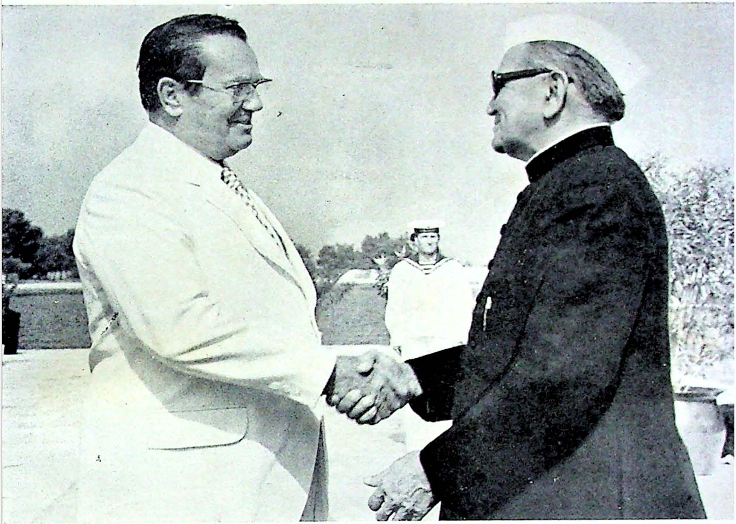
TABLE 17.3
POTENTIALITIES OF TIDAL POWER

Sites		Spring tidal range (metres)	Total max. potential energy 106 kwh/ year
Bhavnagar (Gulf of Cambay)	..	10.8	2,300
Navalakhi (Gulf of Kutch) ..	..	7.5	1,110
Diamond Harbour (Hooghly River)	..	5.9	
Saugar (Hooghly River) ..	..	4.9	1,150

The main problem in exploiting the tidal energy for power generation is the high cost involved in the construction of civil works and also the problem of firming up the fluctuating energy output. Improved methods of design and construction techniques would have to be evolved to substantially reduce the costs.

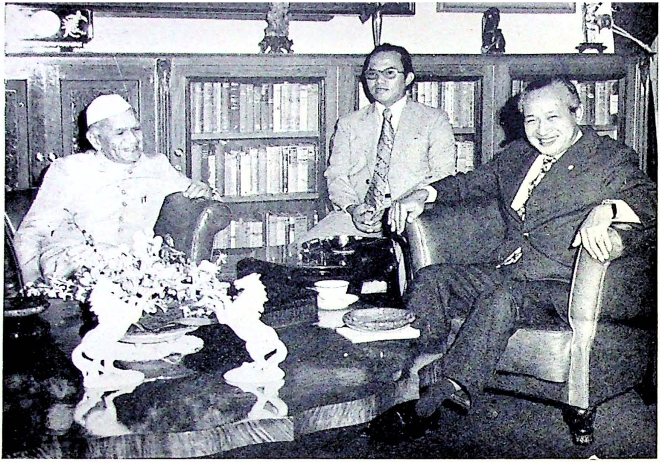
Geothermal Energy

The prospective geothermal regions in India where the generation of geothermal energy is possible are North-West Himalayan ranges, West Coast, Narmada-Son Valley and Damodar Valley. Even though quantitatively geothermal energy may not play a very important role in power generation in India, some of the sources such as Pugga in Ladakh have locational advantages. In 1973 the exploratory work carried out by the Geological Survey of India in Pugga Valley and



President Fakhruddin Ali Ahmed being received by President Tito at Brioni during his visit to Yugoslavia in September-October

President Kenneth Kaunda of Zambia receiving Jawaharlal Nehru Award for 1970 from President Fakhruddin Ali Ahmed in New Delhi in January



The President with President Suharto of Indonesia in Jakarta in May

President Fakhruddin Ali Ahmed with President Anwar Sadat of Egypt in Cairo during his state visit in December

Tea gardens of Assam

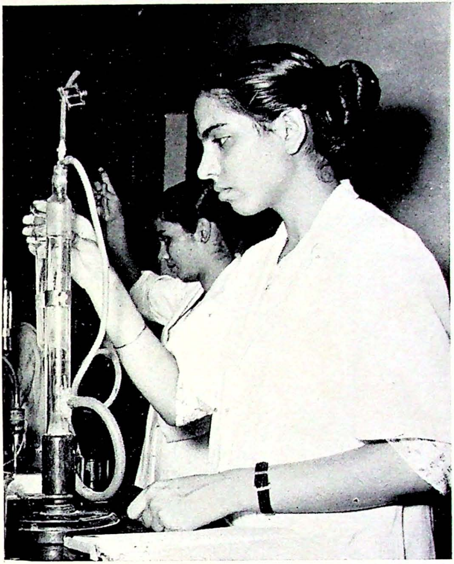
WOMEN TO THE FORE

HMT watch factory, Bangalore

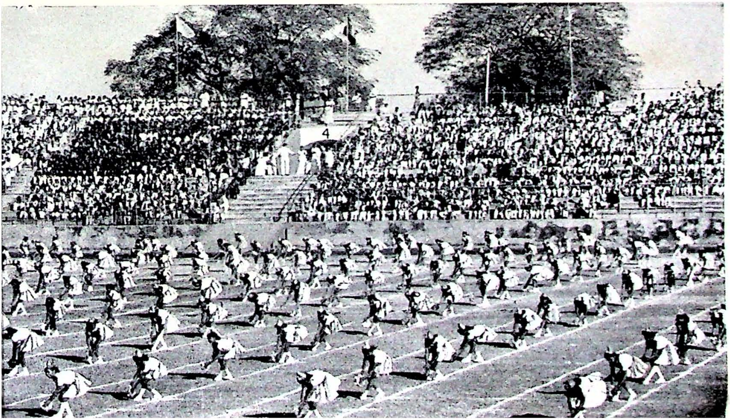
Research centre of HMT, Bangalore

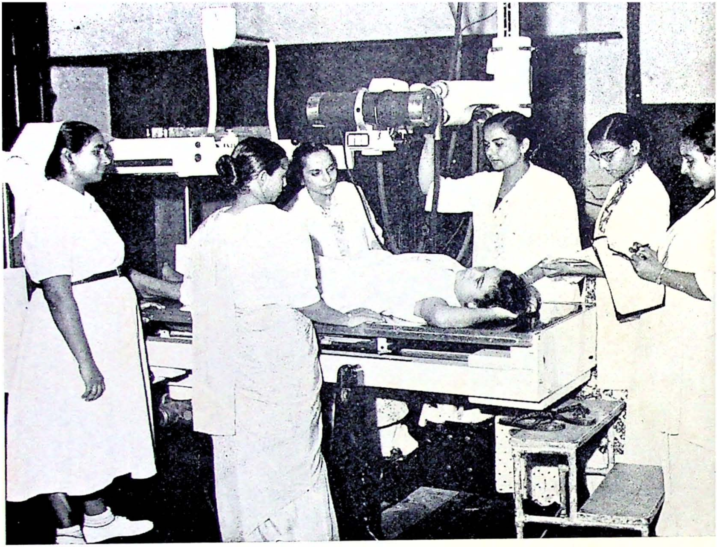
Bharat Electronics Ltd., Bangalore

Medical research



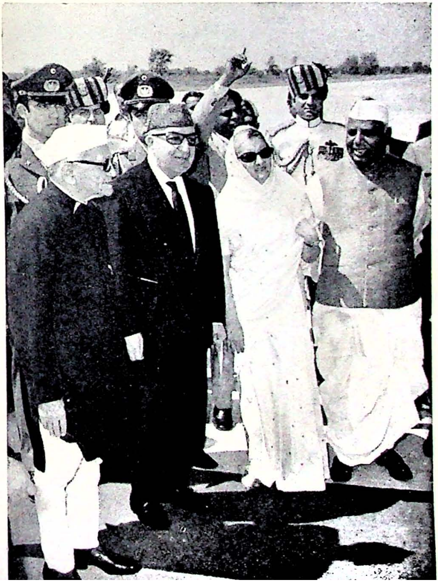
The first National Women's Sports Festival held at National Stadium, New Delhi in November





↑ *Modern medical treatment* ↓ *Training for defence preparedness*

The Prime Minister visited Jamaica to participate in the Commonwealth Prime Ministers' Conference in April. Shrimati Gandhi in conversation with Jamaican Prime Minister Michael Manley



President Mohammad Daoud of Afghanistan being received at Delhi airport in March by the President, the Prime Minister and the Minister of External Affairs

Prime Minister Shrimati Indira Gandhi with Mexican President Luis Echeverria Alvarez, during his visit to India in July

Karakul sheep from the Soviet Union—Ambassador U.F. Maltsev presenting the sheep to the Minister of Agriculture and Irrigation, Shri Jagjivan Ram

Chumattang in Ladakh district of Jammu and Kashmir have established the feasibility of power generation from geothermal energy.

Solar Energy

Useful research work has been done in the country in regard to the utilisation of solar energy and wind power by some of the national scientific laboratories, mainly for water heating by solar heat and for pumping water by wind mills.

Central Electricity Authority

The Central Electricity Authority, established in 1950 as a part-time body, was till recently functioning as an arbitration body. However, with the bifurcation of the Central Water and Power Commission, the functions of the Power Wing of the Central Water and Power Commission have been taken over by the Central Electricity Authority.

Recognising that planning and integration of power systems on a regional basis have to evolve gradually, as the first step in this direction in early sixties, the country was divided into five regions for developing regional grids and promoting coordinated operation of power systems. Regional Electricity Boards were also set up in 1964 in each region to bring about voluntary cooperation between the states. These five Regional Electricity Boards are: Northern Regional Electricity Board covering Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Chandigarh and Delhi; Western Regional Electricity Board covering Gujarat, Madhya Pradesh, Maharashtra, Goa, Daman and Diu and Dadra and Nagar Haveli; Southern Regional Electricity Board covering Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and Pondicherry; Eastern Regional Electricity Board covering Bihar, Orissa, West Bengal and Damodar Valley System; and, North-Eastern Regional Electricity Board covering Assam, Manipur, Meghalaya, Nagaland, Tripura, Arunachal Pradesh and Mizoram.

India has now well-connected power systems in most of the states and inter-state links also exist in almost all the regions. In fact, in view of the critical power supply position inter-system and inter-regional exchanges of power from surplus to deficit areas have been extensively resorted to using the existing links.

PATTERN OF CONSUMPTION

The per capita consumption of electricity in the country was 38 kwh during 1960-61. It increased to 61 kwh by the end of the Third Plan and to 96.6 kwh at the end of the Fourth Plan. The pattern of electricity consumption in the country at present is as follows: domestic 9.1 per cent, commercial 5.5 per cent, industries 65.3 per cent, public lighting 1.1 per cent, railway traction 3.2 per cent, agriculture 12.6 per cent, public water works, sewage, pumping and others 3.2 per cent. The demand for agriculture has registered a very rapid growth, increasing from 4.3 per cent of total consumption in 1951 to 12.6 per cent in 1973-74 whereas the demand from the industrial sector has remained more or less constant around 65 per cent. In some of the States *viz.*, Haryana, Punjab and Tamil Nadu the demand from agricultural sector account for over 25 per cent of the total electricity consumption.

RURAL ELECTRIFICATION

It has been recognised since the advent of planned development that increasing the productivity in the rural sector is crucially important to the economic development of the country.

The progress made in the field of rural electrification in the

various states is quite impressive. Compared to electrification of 0.27 per cent in 1947, 29.2 per cent of all the villages in the country are now receiving the benefits of electrification. In eight states the percentage exceeds the all India average. Haryana and the Union Territories of Chandigarh, Delhi and Pondicherry have electrified all the villages in their respective territories. Punjab, Haryana, Uttar Pradesh, Karnataka, Tamil Nadu, Andhra Pradesh, Maharashtra, Gujarat and Madhya Pradesh together account for about 90 per cent of the total pump sets/tubewells energised in the country.

Rural Electrification Corporation

One of the main difficulties faced in increasing the pace of rural electrification was its financing. A significant step was taken by the Government of India in 1969 by setting up the Rural Electrification Corporation to channelise funds for rural electrification.

The Fourth Plan laid stress on provision of electricity to backward, Harijan and Tribal areas and primary health centres. A scheme was introduced to advance loans to the State Electricity Boards for providing lighting facilities to Harijan basties in the villages already electrified. These loans are channelised through the Rural Electrification Corporation.

As per the Fifth Plan, it is proposed to provide an outlay of Rs 1098.24 crores for rural electrification in the country, comprising Rs 425.91 crores under the normal programme, Rs 272.33 crores under the Minimum Needs Programme and Rs 400 crores to be financed by the Rural Electrification Corporation. The target proposed is the electrification of 1.10 lakh villages and energisation of 15 lakh pump-sets.

A special feature of the Fifth Plan is the introduction of the National Programme of Minimum Needs under which the Government of India has proposed provision of the basic necessities to the under-developed regions of the country, so as to bring them at par with other regions. The Minimum Needs Programme for rural electrification provides for the electrification of 36,500 villages in the backward areas and backward states of the country so as to raise the percentage of rural population benefited by electricity to at least 30-40 per cent in each state by the end of the Fifth Plan.

MAJOR POWER PROJECTS

In March, 1975 there were 77 major hydel power stations and 69 major thermal power stations having an installed capacity of 10 mw and above. There were also a number of power projects under construction, the benefits from which are expected during the Fifth Five Year Plan and shortly thereafter. The salient features of some of the major power projects are briefly described in Tables 17.4 and 17.5.

INTERNATIONAL COOPERATION

India has been cooperating with neighbouring countries in the field of power development.

The cooperation between India and Nepal in the field of power development has been varied and significant. India has financed and constructed the 21 mw hydro-electric project at Trisuli, one of the important sources of power supply in Nepal. Multipurpose-developments in the Gandak and Kosi basins have been taken up for mutual benefit under agreements between the two countries. The Gandak Project includes a 15 mw power station, which is being financed and constructed by India. A 20 mw hydel station is included under the Kosi Project. Financed and constructed by India, the benefits from this project would be shared between the two countries.

The geography of the region comprising Bangladesh and Eastern region of India provides a natural basis for cooperation between the two countries in the development and utilisation of its resources and there is scope for linking power grids of Bangladesh with the adjoining areas of India to the mutual advantage of both the countries. Recognising this, India and Bangladesh have established a Joint Power Coordination Board to promote cooperation in the field of power development.

India has also been providing assistance to Bhutan in the field of power development. The foothill towns of Phuntsholing and Samdhai area in Bhutan receive power from the Jaldhaka Power Station located on the border between India and Bhutan, which has been developed under an agreement between the two countries. On a request from the Government of Bhutan in 1961, a survey of the hydro-electric potential of Wangchy river was undertaken. Subsequently, detailed field investigations were carried out and based on these investigations, a project report on the 300 mw Chuka Hydro Electric Project was prepared. This project is being taken up for construction under an agreement between the two countries for mutual benefit.

The possibility of connecting the power grids of Sri Lanka with that of the Southern region in India is being explored by the two countries. In addition, India is providing technical assistance for preparation of designs and specifications for the Kotamale Hydel Project in Sri Lanka. Indian experts have been deputed to Afghanistan for strengthening the Afghan Electricity Authority. Assistance has been given for construction of the Chardeh Chorband micro hydel project. Indian experts are also assisting in the construction of the project and the key equipment and materials for the project have also been provided.

COAL

Coal is an important mineral as a source of energy. The Fifth Plan provides for a production target of 135 lakh tonnes by 1978-79, which amounts to an increase of 57 lakh tonnes from the level of production (77.9 lakh tonnes) at the end of the Fourth Plan. A phased programme of substitution of furnace oil by coal in a number of industries, consistent with availability of coal and transport capacity, has now been drawn up. It is estimated that approximately 10 lakh tonnes of coal a year would be required for the industries (excluding power houses), which could switch over to coal immediately without major modifications in their plants, thereby effecting a saving of about 40 lakh tonnes of furnace oil. Power houses are switching over from oil to coal quickly.

Fuel Policy Committee Report

The Fuel Policy Committee, appointed by the Government of India in October 1970, in its final report submitted in 1974 made recommendations on various aspects of development and exploitation of commercial sources of energy. Some of the important recommendations in respect of the coal sector are: (a) Coal should be considered as a prime source of energy in the country for the next two decades and the energy policy of the country has to be evolved on this basic premise; (b) A perspective plan should be prepared for coal production and a shelf of project reports should be prepared well in advance in each plan period; (c) The possibility of projecting large scale mechanized open cast mines in Jharia should be studied; (d) Plans for thermal

TABLE 17.4

MAJOR POWER PROJECTS (HYDRO)

Power station	River	State	Installed capacity (mw)	Annual energy (gwh)	Remarks
Schemes in Operation					
Bhakra Ganguwal Kotla	Sutlej	Punjab Haryana and Rajasthan	1,050 77 77	4,240	These stations form part of the Bhakra—Nangal multipurpose project complex.
Gandhi Sagar Rana Pratap Sagar Jawahar Sagar	Chambal	Madhya Pradesh Rajasthan	115 172 99	366 500 316	These three projects form part of the multipurpose development in the Chambal basin.
Rihand Obra Ukai	Rihand Rihand Tapi	Uttar Pradesh Uttar Pradesh Gujarat	300 99 225	880 290 604	A multipurpose project. The station will have an ultimate capacity of 300 mw.
Koyna *St. I* and *II* Machkund Upper Sileru	Koyna Machkund Sileru	Maharashtra Andhra Pradesh, Orissa Andhra Pradesh	540 115 120	3,000 735 386	Extension of capacity by 120 mw at this station is included in the Fifth Plan.
Sharavati	Sharavati	Karnataka	713	4,400	9th & 10th units of 89.1 mw each are under erection, which would increase the installed capacity to 891 mw.
Sabarigiri	Pambiar	Kerala	300	1,160	
Kundah *I* *II* *III* *IV* *V*	Kundah	Tamil Nadu	60 175 120 50 20	1,745	These five stations form part of the hydro-electric development in Kundah valley. The Fourth stage involving addition of capacity at III and IV stages by 110 mw is under progress.
Mettur	Cauvery	Tamil Nadu	200	412	A multipurpose project.
Hirakud Dam Chiplima	Mahanadi	Orissa	198 72	1,055	A multipurpose project completed in two stages.
Balimela	Sileru	Orissa	240	1,180	The station will have an ultimate installed capacity of 360 mw. The 5th and 6th units of 60 mw each are under construction.

Schemes under construction

Baira Siul	Siul, Baira & Bhaldeh	Himachal Pradesh	180	948	A central sector project expected to be completed during Fifth Plan period.
Salal	Chenab	Jammu and Kashmir	345	2,160	A central sector project is expected to yield benefits during Sixth Plan period.
Beas Unit-I (Beas-Sutlej Link)	Beas/Sutlej	Punjab Haryana and Rajasthan	660	3,124	This is part a of multipurpose project in the bay basin development and it involves diversion of Beas waters into Sutlej. This would increase the energy generation at Bhakra Nangal by another 700 gwh to yield benefits during Fifth Plan. There is a provision to add 330 mw at a later date.
Beas Unit-II (Pong)	Beas	Punjab, Haryana and Rajasthan	240	1,083	A multipurpose project. All the units are expected to be commissioned during Fifth Plan period. There is a provision for adding 120mw at a later date.
Maneri-Bhali	Bhagirathi	Uttar Pradesh	105	816	
Ramganga	Ramganga	Uttar Pradesh	180	404	A multipurpose project with all the units expected to be commissioned during the Fifth Plan period.
Koyna Stage III	Koyna	Maharashtra	320	800	
Srisaiam	Krishna	Andhra Pradesh	440	2,600	There is a provision for adding 330 mw at a later stage.
Lower Sileru	Sileru	Andhra Pradesh	400	1,070	All the units are likely to be commissioned during Fifth Plan period. There is a provision for adding 200 mw at a later stage.
Idikki I and II	Periyar	Kerala	780	2,010	All the units are likely to be commissioned during Fifth Plan period. The designed potential will increase by another 360 mw after the diversion of Retayar and Kallar rivers under Stage III.
Kalinadi *St.I.*	Kalinadi	Karnataka	910	4,112	One unit of 135 mw is expected in Sixth Plan.
Loktak	Loktak	Manipur	105	368	All the units are expected to be commissioned during the Fifth Plan period.

TABLE 17.5
MAJOR POWER PROJECTS, THERMAL AND NUCLEAR

Power Station	State	Installed capacity (mw)	Remarks
(i) *Thermal schemes in operation*			
Badarpur	Delhi	300	
Guru Nanak *St. I*	Punjab	110	Second unit of 100 mw is under construction
Harduaganj	Uttar Pradesh	320	
Panki	Uttar Pradesh	64	
Obra	Uttar Pradesh	250	
Obra Exitalies *St. I*	Uttar Pradesh	200	Third unit of 100 mw is under construction
Dhuvaran	Gujarat	534	
Korba	Madhya Pradesh	300	
Satpura	Madhya Pradesh and Rajasthan	312.5	
Trombay	Maharashtra	337.5	
Koradi *St. I*	Maharashtra	240	
Na ik	Maharashtra	280	
Kothagudem *St. I, II, III*	Andhra Pradesh	460	
Ramagundam	Andhra Pradesh	100	
Ennore	Tamil Nadu	340	
Neyveli	Tamil Nadu	600	
Barauni *St. I* and *II*	Bihar	145	
Talcher	Orissa	250	
Santaldih	West Bengal	120	Second, third and fourth units of 120 mw each are under construction
Bandel	West Bengal	330	
(ii) *Nuclear*			
Tarapur	Gujarat and Maharashtra	400	
Rajasthan	Rajasthan	220	Second unit of 220 mw is under construction and is expected to be completed during the Fifth Plan period
(i) *Thermal schemes under construction*			
Guru Nanak *Extn.*	Punjab	220	
Harduaganj *St. V & VI*	Uttar Pradesh	220	
Panki *Extn.*	Uttar Pradesh	220	
Obra *Extn. St. II*	Uttar Pradesh	600	
Obra *Extn. St. III*	Uttar Pradesh	400	
Badarpur *Extn.*	Delhi	200	
Ukai	Gujarat	240	
Ukai *Extn.*	Gujarat	200	
North Gujarat (Gandhi Nagar)	Gujarat	240	
Korba *Extn. I*	Madhya Pradesh	120	
Korba *Extn II*	Madhya Pradesh	200	
Amarkantak *Extn.*	Madhya Pradesh	240	
Satpura *Extn.*	Madhya Pradesh	200	
Koradi *St. II*	Maharashtra	240	
Koradi *St. III*	Maharashtra	600	
Kothagudem *St. IV*	Andhra Pradesh	220	
Vijayawada	Andhra Pradesh	200	
Ennore *Extn.*	Tamil Nadu	110	
Tuticorin	Tamil Nadu	200	
Barauni *Extn.*	Bihar	220	
Pataratu *Extn.*	Bihar	440	
Talcher *Extn.*	Orissa	220	
Kolaghat	West Bengal	200	
Bandel *Extn.*	West Bengal	200	
(ii *Nuclear*			
Kalapakkam	Tamil Nadu	470	

power generation should be coordinated with the plan for coal production; (e) Separate plans should be drawn up for opening export-based coal mines near the ports; (f) All major cities should be provided with gas plants; (g) Selection of optimal technology for coal-mining should be made on economic grounds using proper weightage for availability of abundant labour; (h) A second mine should be cut and opened at Neyveli.

Coal Mining

Coal mining was first started at Raniganj, West Bengal in 1774. After Independence, coal mining was stepped up and in 1950 production was 320 lakh tonnes. In 1974-75 it reached a record figure of 884 lakh tonnes.

The Government of India nationalised the coking coal mines in 1972 and the non-coking coal mines the following year. As a result, the production of coal in the country is now almost completely in the public sector. The only important mines which have not been nationalised are the captive coking coal mines of the two private sector steel companies.

The production of coal in the public sector is organised through three companies, namely, Coal Mines Authority Ltd, which includes its subsidiary, the National Coal Development Corporation, the Bharat Coking Coal Ltd and the Singareni Collieries Company Ltd. A holding company, Coal India Limited, was formed in 1975 incorporating the Coal Mines Authority, the Bharat Coking Coal and the Coal Mines Planning and Design Institute as separate Divisions besides other subsidiaries.

Coal Washeries

Fourteen coal washeries are operating for the beneficiation of coking coal. There is also a small washery for non-coking coal. The total input capacity of the coking coal washeries is estimated at about two crore tonnes.

The Coal Board, which was the statutory body for promoting safety in coal mines and conservation of coal, was abolished with effect from 1 April 1975 under an Act of Parliament as a result of which the work of conservation and safety is undertaken directly by the coal companies. Five central ropeways constructed by the Board in the Jharia and Raniganj coalfields for transportation of sand from Damodar and Ajoy rivers to coal mines for stowing, have been transferred to the Bharat Coking Coal Ltd and the Coal Mines Authority after the nationalisation of coal mines.

Lignite

Lignite, though inferior in calorific value (one tonne of Gondwana coal equals about 2 tonnes of lignite), is particularly important to Western and Southern Regions due to the geographical location of the deposits and the absence of coal in these regions. Out of a total 21,000 lakh tonnes of lignite in the country, about 1,900 lakh tonnes are available in the Neyveli area alone.

TABLE 17.6
PRODUCTION OF COAL AND LIGNITE

(quantity in '000 tonnes)

	1972		1973		1974 (Provisional)	
	Quantity	Value (Rs '000)	Quantity	Value (Rs '000)	Quantity	Value (Rs '000)
Coal	75,658	27,54,621	77,088[1]	2,83,066[1]	83,900	39,60,000
Lignite	3,067	1,12,174	3,303	1,20,812	3,014	1,62,756

[1] Provisional

The integrated lignite project at Neyveli was set up during the Second Plan for mining 36 lakh tonnes of lignite per annum. The capacity of the project is being increased in the first instance to 45 lakh tonnes and ultimately to 65 lakh tonnes.

The quantity and value of coal and lignite produced during 1972, 1973 and 1974 are given in Table 17.6.

OIL

Exploration for petroleum and setting up of oil refineries were taken up in earnest only after Independence. Production of refined petroleum products, which was only 2 lakh tonnes in 1950-51, increased to 193 lakh tonnes in 1974. Production of crude oil in 1974 was about 75 lakh tonnes. About 140 lakh tonnes of crude oil was imported to meet the country's requirements in 1974.

There are two principal organisations engaged in the exploration and production of crude oil in the country. They are the Oil and Natural Gas Commission, wholly owned by the Government of India, and the Oil India Ltd., a joint sector undertaking. A brief description of the two organisations is given below.

Oil and Natural Gas Commission

The Oil and Natural Gas Commission (ONGC) with headquarters at Dehra Dun, has been carrying out oil exploration since 1956. Its operations extend over the entire territory of India, except certain areas leased in the north-east of the country to Oil India Ltd. and Assam Oil Company, and covers off-shores areas. The number of wells drilled up to 31 March 1975 was 1,173. Of these, 605 were oil-bearing and 79 gas producing. The main oil fields are Ankleshwar, Nawagam, Kalol, Kosamba, Sanand, Kathana, Wavel, Barkrol, Dholka, Ahmadabad, Indore, Balol Santhol, Mehsana, Sobhasan, Kadi and Dabka structures in Gujarat and Rudrasagar, Lakwa, Galeki, Borhella and Anguri structures in Assam. Production from ONGC oil fields during 1974-75 was about 45.2 lakh tonnes.

The Commission has also started oil exploration in the off-shore areas. In 1973, it began drilling for oil in the Bombay High structure in the deep waters off the western coast of the country with the help of 'Sagar Samrat', a self-propelled jack-up type of drilling platform. Exploration yielded very encouraging results. Development and production is now under way, since exploration is over. Production is expected to start by April 1976.

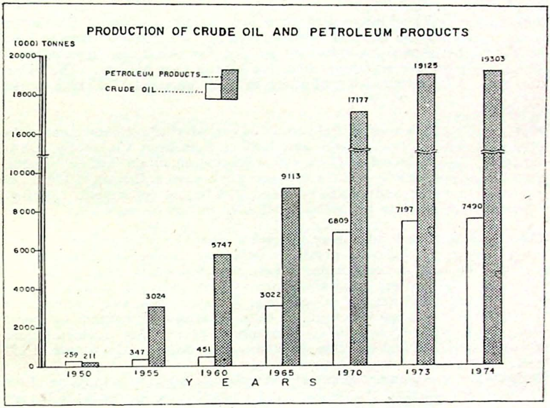
ONGC also undertakes exploration for oil in foreign countries. At present, its subsidiary, Hydrocarbons India Ltd. (HIL) is drilling for oil in an off-shore concession in Iran in partnership with three foreign companies. The share of HIL is one-sixth of the oil produced. ONGC has also secured a concession for oil exploration in Iraq which will also be handled by HIL.

Oil India Ltd.

Oil India Ltd., (OIL), in which the Government of India and the Burmah Oil Company have equal shares, was incorporated in Assam in 1959 for the exploration and production of crude oil (including natural gas) in a limited area of Assam and Arunachal Pradesh and for the construction of a pipeline to transport crude oil to the two public sector refineries at Gauhati and Barauni and the private sector refinery at Digboi.

The company had drilled 347 wells till 31 December 1975. The company produced and supplied over 30 lakh tonnes of crude oil from

its oil fields to the three refineries in 1974. The capacity of its pipeline is being expanded to feed more crude to the three refineries and the proposed refinery at Bongaigaon.



Refineries

There are at present ten, refineries, seven in the public sector and three in the private sector. Nine refineries together processed 2.07 crore tonnes of crude in 1974, 1.51 crore tonnes in public sector and 56.8 lakh tonnes in private sector. The tenth refinery at Haldia started commercial production in January 1975.

The private sector refineries are at Digboi (Assam Oil Company), Trombay (Burmah-Shell)[1] and Vishakhapatnam (Caltex). The public sector refineries are at Gauhati, Barauni, Koyali, Cochin, Madras Bombay (HPCC) and Haldia. The refineries at Gauhati, Barauni, Koyali and Haldia are owned by the Indian Oil Corporation, while those at Cochin, Bombay and Madras are owned by three separate refinery companies.

A brief description of the public sector refineries is given below :

Gauhati

The refinery at Gauhati started operations in 1962. It has a capacity of 7.5 lakh tonnes. In 1974, it processed 7.52 lakh tonnes of crude oil.

Barauni

The refinery at Barauni has a capcity of 30 lakh tonnes per annum It processed 28.17 lakh tonnes of crude in 1974.

[1]The Burmah Shell refinery became a public sector undertaking with the new name of Bharat Refineries Limited after 100 per cent transfer of shares to the central government on 24 January 1976. With the take over of Burmah Shell, Government took control of nearly 95 per cent of the total production and marketing of petroleum products in the country.

Koyali

The Koyali refinery near Vadodara processes indigenous crude oil discovered in the Gujarat region. It refines 37 lakh tonnes per annum. The capacity of the refinery is being increased from 43 lakh tonnes to 73 lakh tonnes and the project is expected to be completed in 1977.

Madras

The Madras Refineries Ltd., a joint venture of the Government of India (owning majority shares), the National Iranian Oil Co., and Amoco, a subsidiary of the Pan American International Oil Co., have set up a refinery at Manali near Madras. The refinery, which commenced production in 1969, processed 23.25 lakh tonnes of crude oil in 1974.

Cochin

The Cochin Refineries Ltd., in which the Government of India holds majority shares and Phillips Petroleum Co. of the USA provides technical and financial collaboration, established an oil refinery with a capacity of 25 lakh tonnes per annum at Cochin in 1966. Its capacity has been increased to 33 lakh tonnes per annum. During 1974, the refinery processed 23.45 lakh tonnes of crude oil.

HPCL

The Esso refinery at Bombay signed an agreement with the Government of India on 14 March 1974 under which the Government purchased 74 per cent shares in Esso Standard Refining Co. of India Ltd. and 24 per cent additional shares in Lube India Ltd. in which the government had already 50 per cent shares. These two companies were subsequently merged to form Hindustan Petroleum Corporation Ltd., on 15 July 1974. The refinery processed 31.53 lakh tonnes of crude oil and its Lube oil production was 1.86 lakh tonnes in 1974.

New Refinery Projects

A number of new refinery projects are in various stages of construction to meet the country's requirements. A description of the new projects is given below.

Haldia

A refinery with a capacity of 25 lakh tonnes per annum is under construction at Haldia in West Bengal. It is being set up by the Indian Oil Corporation with French and Rumanian collaboration. The project consists of two sectors, namely, the fuel sector and the lube sector.

Bongaigaon

A refinery with an annual capacity of 10 lakh tonnes is being established at Bongaigaon in Assam to process crude oil produced in the Assam fields by OIL and ONGC and transported through the existing Oil India pipeline from Naharkatiya. The capacity of the pipeline is being expanded to carry additional crude to the Bongaigaon refinery. The refinery is expected to go on stream in 1977.

Mathura

The biggest refinery in the country is being set up at Mathura in Uttar Pradesh with a capacity of 60 lakh tonnes per annum. Crude oil for the refinery, to be obtained through imports, will be received at a location in the Gulf of Kutch and transported across over a distance of 1,222 km by pipeline. The refinery is expected to be commissioed by 1978.

Pipelines

Prior to 1964, a pipeline had been constructed to transport the crude from the Naharkatiya oil fields to the Gauhati and Barauni refineries. Since then, various multi-product pipelines have been laid. These are Gauhati-Siliguri, Koyali-Ahmadabad, Barauni-Kanpur and Haldia —Maurigram-Rajbandh pipelines. There is also a network of pipelines

in Gujarat for transporting crude oil from the Gujarat oil fields to the Koyali refinery.

A 1,256 km pipeline is to be laid from Salaya in the Gulf of Kutch to Koyali and Mathura via Viramgram in Gujarat to supply imported crude to the expanded Koyali refinery and Mathura refinery. Imported crude will be received at an off-shore terminal, which is the first of its kind to be undertaken in the country. The off-shore terminal and the Salaya-Koyali sector of the pipeline are expected to be completed by 1977. The completion of the Viramgram-Mathura sector will synchronise with the completion of Mathura refinery.

Marketing and Distribution

Indian Oil Corporation

The Indian Oil Corporation (IOC) was set up in 1964 by amalgamating Indian Refineries Ltd. and the Indian Oil Company Ltd. IOC has two divisions, namely, Refineries and Pipelines Division and Marketing Division. The Marketing Division obtains products from IOC's own refineries, MRL, CRL and imports. The Corporation is developing a research and development centre at Faridabad, Haryana, at a cost of Rs 4.84 crores. It provides technical service to customers and is engaged in development of sophisticated lubricating oils.

In addition HPCL, another public sector undertaking markets petroleum products obtained from its own refinery at Bombay.

Market participation of the Corporation was about 64.7 per cent of the total sales in 1974-75. The number of retail outlets, which was 3,483 on 31 March 1974, rose to 3,574 on 31 March 1975. IOC is also marketing cooking gas (LPG) for domestic use in 159 cities.

For meeting the deficit of petroleum products in the country, IOC makes arrangements for imports. It also undertakes export of products. During 1974, the Corporation's imports of refined products were valued at about Rs 216 crores, while its exports amounted to about Rs 30.56 crores.

Indo-Burma Petroleum Company Ltd.

Apart from marketing petroleum products obtained from IOC this public sector company has three Divisions *viz*. Oil Division, Electronics/ Manufacturing Division and Chemicals Division.

Bitumen Marketing Corporation

For marketing bitumen produced in the country, Bitumen Marketing Corporation was set up in the public sector in 1974. The Corporation is expected to start functioning shortly.

Indian Oil Blending Ltd.

The Indian Oil Blending Ltd., which was a joint venture (50:50 basis) of IOC and Mobile Petroleum Co. Inc., New York, is now a wholly owned subsidiary of IOC. From the second half of 1974, it is engaged in blending the wholly indigenous Servo grade of lubricants for the IOC.

Lubrizol India Ltd.

To produce various chemical additives, a plant was set up in Bombay in 1968 by Lubrizol India Ltd., a joint venture of the Government of India and the Lubrizol Corporation of the USA. During 1974, the production was 9,741 tonnes.

Engineering Consultancy

The Engineers India Ltd., New Delhi, was constituted in 1965 to provide engineering and consultancy services to government agencies and projects in the public and private sectors in the field of petroleum, petro-chemicals and fertilizers. It also competes for jobs in the international market.

18 INDUSTRY

A century of industrial development pales into insignificance when compared with the rapid industrial growth witnessed during over two decades of planned development. Industrial production has increased by about 274 per cent in 1974 as compared to 1951. While almost all groups of industries contributed to this increase, the growth has been particularly marked in the newer and more complex industries, such as, petroleum products, aluminium manufacture, metal products, electrical and non-electrical machinery.

Side by side, the different Five Year Plan periods saw the expansion and diversification of the industrial structure with the establishment of new units in the existing fields as well as the setting up of new enterprises. As a result, the number of industrial units has increased significantly. In 1951, there were only two major units producing iron and steel. There are now six major steel plants of which the production of saleable steel by 5 plants amounted to nearly 49 lakh tonnes. The steel produced by these plants has provided the basis for achieving self-sufficiency in making a number of engineering goods, from a pin to giant machinery. In the field of new industries, the dyestuff industry, which practically did not exist in 1951, has progressed to such an extent that the import of most of the dyes has been stopped. The drug industry is also developing fast. The textile industry is no longer confined to the cotton and jute textiles. Today, there are quite a few units producing different types of synthetic fibres. The machine building industry, too, has made rapid strides. The engineering industry can supply virtually the entire requirement of power generating equipment, equipment for railways, road transport and communications. Self-sufficiency has been reached with regard to sugar and cement machinery, power boilers, material handling equipment and a large number of consumer durables.

An important feature of industrial growth in the country after Independence has been the rapid expansion of the public sector. In 1951, there were only five non-departmental public undertakings with an investment of Rs 29 crores. On 31 March 1974, they numbered 122 with an investment of Rs 6,237 crores. These enterprises produce diverse products such as, steel, coal, aluminium, copper, heavy and light engineering products, fertilizers, basic chemicals, drugs, minerals, petroleum products, locomotives, aircraft and ships.

Annual Survey

The provisional summary results of the Annual Survey of Industries for 1970 showed that there were 13,598 (13,101)[1] registered factories, employing 50 or more workers with the aid of power and 100 or more workers without the aid of power, showing an increase of 3.79 per cent over 1969. Of these, the factories which reported data numbered 13,280 (12,754) representing an increase of 4.12 per cent over 1969. With a productive capital of Rs 11,105.8 (9,933.1) crores, these factories provided employment to 42.6 (41.5) lakh persons distributing an annual wage bill of Rs 1,516.9 (1,341.0) crores. This represented an increase of 11.18 per cent in the productive capital, 2.60 per cent in employment and 13.09 per cent in the wage bill. With an input of Rs 7,957.2

[1] Figures in brackets are for 1969.

(7,010.9) crores, the factories generated an output of Rs 11,399.4 (9,991.2) crores. As a result, the net value added to the national economy was Rs 2,878.2 (2,467.5) crores, an increase of 13.26 per cent in the input, 14.09 per cent in the output and 16.64 per cent in value.

The most industrialised states, according to the Survey, were Maharashtra, West Bengal, Tamil Nadu, Gujarat, Uttar Pradesh, Bihar, Andhra Pradesh, Karnataka and Madhya Pradesh. The value of output of each of these nine states was more than 4 per cent of the total value of output. They accounted for 78.86 per cent of the reporting factories, 81.25 per cent of the productive capital, 83.51 per cent of the total employment, 84.76 per cent of the total output and 83.62 per cent of the value added. Three states, namely, Kerala, Haryana and Punjab had a share of 2.70 per cent, 2.30 per cent and 2.22 per cent respectively of the output. They also accounted for 10.23 per cent of the total reporting factories, 7.34 per cent of the total productive capital, 7.82 per cent of the total employment, 7.22 per cent of the total output and 6.59 per cent of the total value added. Twelve states and union territories, namely, Assam, Himachal Pradesh, Jammu and Kashmir, Manipur, Orissa, Rajasthan, Tripura, Andaman and Nicobar Islands, Chandigarh, Delhi, Goa, Daman and Diu and Pondicherry had 10.91 per cent of the total factories with 11.41 per cent of the productive capital. They provided employment to 8.67 per cent of the total employment, generated 8.02 per cent of the total output and contributed to the national economy to the extent of 9.79 per cent of the total value added.

With regard to industry-wise position, 19 industry groups taken together accounted for 65.73 per cent of the reporting factories, 94 per cent of productive capital, 85.67 per cent of total employment, 87.34 per cent of the output and 90.03 per cent of the value added by manufacture. Among the industry groups, '231'—spinning, weaving and finishing of textiles—was a major one. The share of this industry group alone to the value added was 18.87 per cent and it accounted for 10.29 per cent of the reporting factories, 7.09 per cent of the productive capital, 26.58 per cent of the employment and 18.20 per cent of the value of output.

POLICY AND PROGRESS

INDUSTRIAL POLICY

Independent India's industrial policy was first announced in 1948. This envisaged a mixed economy with an overall responsibility of the government for planned development of industries and their regulation in the national interest. While it reiterated the right of the State to acquire an industrial undertaking in public interest, it reserved an appropriate sphere for private enterprise. The policy was revised in 1956 following Parliament's acceptance in 1954 of a socialist pattern of society as the national objective. Under the revised policy, industries specified in Schedule A (enumerated below) are the exclusive responsibility of the State, while industries in Schedule B (also enumerated below) are to be progressively State-owned, but private enterprise is expected to supplement the efforts of the State in these fields. Future development of industries falling outside the two Schedules will, in general, be left to private enterprise. Notwithstanding this demarcation, it will always be open to the State to undertake any type of industrial production.

Schedule A Industries: Arms and ammunition and allied items of defence equipment; atomic energy; iron and steel, heavy castings

and forgings of iron and steel; heavy plant and machinery required for iron and steel production, for mining, for machine tool manufacture and for such other basic industries as may be specified by the central government; heavy electrical plant including large hydraulic and steam turbines; coal and lignite; mineral oils; mining of iron ore, manganese ore, chrome ore, gypsum, sulphur, gold and diamonds; mining and processing of copper, lead, zinc, molybdenum and wolfram; minerals specified in the Schedule to the Atomic Energy (Control of Production and Use) Order, 1953; aircraft; air transport; railway transport; ship-building; telephones and telephone cables; telegraph and wireless apparatus (excluding radio receiving sets); generation and distribution of electricity.

Schedule B Industries: All other minerals except 'minor minerals' as defined in Section 3 of the Minerals Concession Rules, 1949; aluminium and other non-ferrous metals not included in Schedule A; machine tools; ferro-alloys and tool steels; basic and intermediate products required by chemical industries, such as, the manufacture of drugs, dyestuffs and plastics; antibiotics and other essential drugs; fertilizers; synthetic rubber; carbonisation of coal; chemical pulp; road transport and sea transport.

Regulation of Industry

In line with the policy first announced in 1948, the Constitution was amended and the Industries (Development and Regulation) Act, 1951 was enacted. Under this, industries listed in the first Schedule to the Act are required to be licensed by the government. The Act also authorises the government to examine the working of any such industrial undertaking and to issue directions which it considers necessary. If the undertaking continues to be mismanaged, the government is empowered to take over its management or control. The Act empowers the government to secure equitable distribution and fair prices of any article produced by the scheduled industries.

Industrial Licensing

An important objective of the industrial policy is to prevent the emergence of private monopolies and the concentration of economic power in the hands of a small number of individuals. This problem was studied by the Mahalanobis Committee on Distribution of Income and Levels of Living (1960), the Monopolies Enquiry Commission (1964), and the Industrial Licensing Policy Inquiry Committee (ILPIC) (1967). The Administrative Reforms Commission and the Planning Commission also made various recommendations. As a result, the Monopolies and Restrictive Trade Practices (MRTP) Act was passed in 1969 and under the Act the Monopoly and Restrictive Trade Practices Commission was appointed in 1970. The Industrial Licensing Policy was modified in 1970 and again in 1973.

The latest modifications reaffirmed that the Industrial Policy Resolution of 1956 will continue to govern government's policies in the industrial sphere. All industries of basic and strategic importance, or in the nature of public utility services will continue to be in the public sector. Industries which are essential and require investment on a scale, which only the State in the present circumstances could provide, will also be in the public sector. Some other salient features of the new changes are:

A larger industrial house for licensing purposes will mean a house having assets, along with assets of inter-connected undertakings (as defined in the MRTP Act, 1969), of not less than Rs 20 crores as against assets exceeding Rs 35 crores provided by the ILPIC.

The list of industries, which are open for larger industrial houses and foreign concerns and subsidiaries and branches of foreign companies along with other applicants, has been consolidated. They cannot, however, participate in the production of any item reserved for the public sector as mentioned in Schedule A or the small-scale sector. The consolidated list covers 19 groups, *viz.*, 1. metallurgical industries: (i) ferro-alloys, (ii) steel castings and forgings, (iii) special steels, and (iv) non-ferrous metals and their alloys; 2. boilers and steam generating plants; 3. prime movers (other than electrical generators): (i) industrial turbines, and (ii) internal combustion engines; 4. electrical equipment: (i) equipment for transmission and distribution of electricity, (ii) electrical motors, (iii) electrical furnaces, (iv) X-ray equipment, and (v) electronic components and equipment; 5. transportation: (i) mechanised sailing vessels up to 1,000 dwt, (ii) ship ancillaries, and (iii) commercial vehicles; 6. industrial machinery; 7. machine tools; 8. agricultural machinery, tractors and power tillers; 9. earthmoving machinery; 10. industrial instruments, indicating, recording and regulating devices for pressure, temperature, rate of flow, weights levels and the like; 11. scientific instruments; 12. nitrogenous and phosphatic fertilizers falling under inorganic fertilizers under '18 Fertilizers' in the First Schedule to the I D & R Act, 1951; 13. chemicals (other than fertilizers): (i) inorganic heavy chemicals, (ii) organic heavy chemicals, (iii) fine chemicals, including photographic chemicals, (iv) synthetic resins and plastics, (v) synthetic rubbers, (vi) man-made fibres, (vii) industrial explosives, (viii) insecticides, fungicides, weedicides and the like, (ix) synthetic detergents and (x) miscellaneous chemicals (for industrial use only); 14. drugs and pharmaceuticals; 15. paper and pulp including paper products; 16. automobile tyres and tubes; 17. plate glass: 18. ceramics; (i) refractories, and (ii) furnace lining bricks—acidic, basic and neutral; and 19. cement products: (i) portland cement and (ii) asbestos cement.

The larger industrial houses will ordinarily be excluded from the industries not included in the 19 groups except where production is predominantly for exports. The minimum export obligation in such cases will be at least 60 per cent of the additional production (75 per cent in the case of industries normally reserved for small-scale units). The investment of foreign concerns will continue to be subjected to the 'guidelines on the dilution of foreign equity' and will be examined with special reference to technological aspects, export possibilities and the overall effect on the balance of payments.

Competent small and medium entrepreneurs will be preferred *vis-a-vis* the larger industrial houses and foreign concerns in the setting up of new capacity. Licensing policy will seek to promote production of ancillaries in the medium or small-scale sector. Co-operatives and small and medium entrepreneurs will be encouraged to participate in the production of mass consumption goods. Other investors will be allowed to participate only if there are special factors, such as, sizeable economies of scale resulting in reduced prices, technological improvements, large investment requirements, substantial export possibilities or as part of modernisation. The co-operative sector will also get preference in the licensing of industries which process agricultural raw materials, such as, sugarcane, jute, cotton or produce agricultural inputs, such as, fertilizers.

The policy of reservation for the small-scale sector (involving investment in machinery and equipment up to Rs 10 lakhs) and ancillary industries (involving investment in plant and equipment

up to Rs 15 lakhs) will be continued. The government will extend the area of reservation for this sector keeping in view its performance and potentialities.

The exemption limit for licensing provision, which now applies to substantial expansions and new undertakings up to Rs 1 crore by way of fixed assets in land, buildings and machinery, will be continued. This exemption will not apply to existing licensed or registered undertakings having fixed assets exceeding Rs 5 crores, larger industrial houses, dominant undertakings and to foreign companies including their branches and subsidiaries.

Each proposal for establishing a joint sector project will be judged and decided on its merits in the light of government's social and economic objectives. The undertakings covered by the MRTP Act will not be allowed to use the device of joint sector projects for entry in industries from which they are otherwise precluded. The government will also ensure for themselves an effective role in guiding policies, management and operation of joint sector companies.

Liberalisation following Declaration of Emergency

In pursuance of the 20-Point Economic Programme, the government decided to exempt from the normal industrial licensing procedure medium entrepreneurs to enable them to set up industrial capacities based on indigenous equipment and local raw materials and also to utilise to a fuller extent the existing installed capacities. Accordingly, 21 medium industries were exempted from the licensing provisions for setting up a new undertaking, substantial expansion of the existing capacity and manufacture of new articles.

Another 29 medium sector industries were allowed fuller utilisation of the installed capacities. This was done with the twin objective of containing inflation and increasing production in key and important industries.

To liberalise investment procedure, powers have been delegated to administrative ministries to dispose of certain types of applications including those for diversification, carry-on-business licences and extension of validity period of letters of intent or industrial licences.

Fifteen selected engineering industries, particularly export oriented ones, have been allowed to grow at the rate of 5 per cent per annum or up to a ceiling of 25 per cent in a plan period in one or more steps, over their licensed capacity.

The government has also decided that the industrial undertakings, other than those coming within the purview of the Monopolies and Restrictive Trade Practices Act and foreign companies, would be allowed to set up capacity based on the results obtained by their own research and development effort.

STANDARDISATION

National standards for commodities, materials and processes are laid down by the Indian Standards Institution (ISI) which was set up in New Delhi in 1947. It also promotes standardisation and quality control in industrial technology and imparts training in standardisation techniques to Indian and foreign company executives and technical personnel. The number of standards in force as on 31 July 1975 was 8,230.

The Institution also operates the ISI Certification Mark Scheme under which licences are issued to manufacturers for applying the Certification Mark on their products as a third party guarantee about their quality. The number of licences issued for the use of Certification Mark on Products up to July 1975 was 4,538.

The Institution represents India on the International Organisation for Standardisation and International Electrotechnical Commission.

INDUSTRIAL FINANCE

Institutional finance for industries is provided by several term-lending institutions both at the all-India level as well as the state level. The institutions which supply industrial finance are described below.

IFCI

The Industrial Finance Corporation of India (IFCI), which was established under an Act of Parliament in 1948 and is now a subsidiary of the Industrial Development Bank of India, provides long-term loan assistance to industrial concerns, both in the public and private sectors. The Corporation also provides training in modern management techniques to its clients. From its inception and up to 31 March 1975, the total net financial assistance sanctioned and disbursed by IFCI amounted to Rs 498.80 crores and Rs 430.70 crores respectively.

SFCs

Eighteen State Financial Corporations, including the Tamil Nadu Industrial and Investment Corporation, supply industrial finance to medium and small-scale sectors. The total loans sanctioned by them during April-February 1974-75 amounted to Rs 128.8 crores as against Rs 96.8 crores during 1973-74. The outstanding loans on 28 February 1975 totalled Rs 264.0 crores, *i.e.*, 21.9 per cent higher than a year ago.

The International Development Association (IDA) has sanctioned a credit of $ 2.5 crores to India for meeting the foreign exchange requirements of small and medium projects financed by SFCs and refinanced by the Industrial Development Bank of India which will enable SFCs to assist medium and small-scale units for import of plant and machinery. Up to 31 March 1975, the SFCs had sanctioned 303 applications for Rs 19.21 crores (both rupee and foreign exchange component) under this line of credit.

IDBI

The Industrial Development Bank of India (IDBI) was set up in 1964 to co-ordinate the activities of other financial institutions (including banks), supplement their resources to plan and promote industries of key significance to the industrial structure and to adopt and enforce a system of priorities in promoting future industrial growth. In 1975, IDBI Act has been amended to restructure it as the principal financial institution. During its existence it has established itself as an apex development bank. In 1970, IDBI in collaboration with other term-lending institutions and the Reserve Bank initiated industrial potential surveys of specific backward regions for the purpose of identifying specific project ideas for implementation in the next 5 to 10 years in the light of the resources endowments, demand potential and availability of infrastructure facilities over a period of 5 to 10 years. These surveys have been completed in respect of 18 states and union territories, and except the report on Andaman and Nicobar Islands, all other reports have been published. By 30 June 1974, 418 project ideas involving an investment of Rs 2,578.29 crores had been identified in these areas. Of these, 257 project ideas involving an investment of Rs 1,814.56 crores, had been recommended by the joint institutional study teams for implementation. The bank had sanctioned up to 31 March 1975 financial assistance (excluding guarantees) totalling Rs 1,213.4 crores, of which Rs 887.2 crores had been disbursed.

ICICI

The Industrial Credit and Investment Corporation of India (ICICI)

was set up in 1955. During 1974, it provided financial assistance of Rs 71.09 crores (including foreign currencies) as against Rs 69.02 crores in 1973. The amount disbursed was also higher at Rs 48.36 crores as against Rs 41.61 crores in the preceding year. From its inception and up to 31 December 1974, the total amount sanctioned (net) and disbursed was Rs 508.10 crores and Rs 357.16 crores respectively.

IRCI

The Industrial Reconstruction Corporation of India (IRCI), which was set up in 1971, is mainly concerned with the revival and revitalisation of industrial units which have closed down or are facing closure but show promise of viability by reconstruction of share capital, strengthening of management, provision of finance on soft terms, improvement in technology and labour relations. Up to 31 March 1975, IRCI had sanctioned loan assistance on soft terms and guarantee facilities to 92 units for Rs 28.40 crores.

NIDC

The National Industrial Development Corporation (NIDC) was set up in 1954 for the rehabilitation and modernisation of cotton textile and jute industries and for the expansion of machine tool units. It is providing engineering consultancy services both at home and abroad. The Corporation's consultancy services are being increasingly utilised by developing countries like Iran, Kenya, Libya, Malaysia, Nepal, Tanzania, the Gulf States and also by a developed country, Italy. The United Nations Industrial Development Organisation and some private parties in UK have also given assignments to NIDC. Its foreign exchange earnings totalled Rs 10.89 lakhs during 1974-75.

UTI

The Unit Trust of India (UTI) was established in 1964 as a public sector investment institution for mobilising the savings of the community and channelising them into productive corporate investments so as to provide for the growth and diversification of the country's economy.

To achieve this UTI sells 'Units' of the denomination of Rs 10 to public for investment in 'Units' to provide an opportunity to investors, particularly to those belonging to small and medium income groups indirectly to participate in the ownership of shares and debentures of joint stock companies. For this purpose UTI has formulated two schemes for selling 'Units', namely Unit Scheme 1964 and Unit Scheme 1971. In order to cater to specific investment needs of different types of investors, UTI framed specific savings plans linked to the Unit Schemes, *viz.*, Reinvestment Plan 1966, Children's Gift Plan 1970 and Unit-Linked Insurance Plan 1971. The net sales of Units under Unit Scheme 1964 on 31 March 1975 amounted to Rs 146 crores, the number of unit holder accounts being 5,70,000. The dividend distribution which was 6.1 per cent in 1964-65 was gradually raised to 8.5 per cent by 1972-73. This rate was maintained for 1973-74. It was 8.6 per cent in 1974-75.

FOREIGN CAPITAL

To supplement the capital resources and know-how for rapid industrial development, the Government of India allows foreign assistance in desirable cases. The policy in regard to foreign capital is governed by the Industrial Policy Resolution of 1948 and the Prime Minister's statement in the Constituent Assembly in 1949. Under this, the government's policy towards foreign investment is highly selective and aims at filling technological gaps and expanding exports. Foreign

capital is not permitted in the fields of banking, commerce, finance, plantations, trading, consumer and high profit yielding industries.

Under section 29 of the Foreign Exchange Regulation Act 1973 companies incorporated abroad and Indian companies having more than 40 per cent non-resident interest are required to obtain fresh permission of the Reserve Bank of India to carry on their existing business activities in India.

According to the guidelines issued by the government, branches of foreign companies would be required to convert into Indian companies with foreign holdings ranging between 40 per cent and 74 per cent. The Indian companies with more than 40 per cent non-resident interest would also be required to reduce the foreign holdings to 74 per cent or 40 per cent depending upon the nature of business activities.

DEVELOPMENT OF INDUSTRIES

The history of organised industry in India may be traced to 1854 when the real beginnings of the cotton mill industry were made in Bombay with predominantly Indian capital and enterprise. The foundations of jute industry were laid near Calcutta in 1855, mostly with foreign capital and enterprise. Coal-mining also progressed about this time. These were the only major industries which had developed substantially before the First World War. During and after World Wars I and II, a somewhat more liberal policy was adopted by the authorities, such as, a discriminating protection policy, which gave impetus to industrial development. Several industries rapidly expanded and a number of new industries came up, such as, steel, sugar, cement, glass, industrial chemicals, soap, vanaspati and some branches of engineering. But their production was neither adequate in quantity for meeting even the low level of internal demand nor diversified in character.

Progress

First and Second Plans

During the First and Second Five Year Plans (1951-52 to 1960-61), the growth and diversification of industry were remarkable, particularly in the Second Plan. Three new steel plants, each of 10 lakh ingot tonnes capacity, were set up in the public sector and the capacity of the two existing steel works in the private sector was doubled. Foundations were laid of heavy electrical and heavy machine tools industries and heavy machine building and other branches of heavy engineering industries. The production of machinery for cement and paper industries was started for the first time. In chemical industries the advance was on a wide front, leading not only to large units and greatly increased output of basic chemicals, such as, nitrogenous fertilizers, caustic soda, soda ash and sulphuric acid, but also in the manufacture of a number of new products like urea, ammonium phosphate, penicillin, synthetic fibres, industrial explosives, polyethylene and dyestuffs. The output of many other industries like bicycles, sewing machines, telephone and electrical goods increased substantially. New skills were learnt by the workers and a large and growing class of industrial managers came into being. Organised industrial production practically doubled in these ten years; the index of industrial production rose from 100 in 1950-51 to 194 in 1960-61. New industrial townships and factories sprang up in the environs of the main cities of the country.

At the same time there were some large shortfalls. The combined output of the new steel plants was only 6 lakh tons in 1960-61 as against the target of 20 lakh tons. The expansion of the government-owned Sindri Fertilizer Factory and the private sector ammonium

chloride project at Varanasi were completed 12 to 18 months after the scheduled dates. The three fertilizer plants in the public sector at Nangal, Neyveli and Rourkela and the Heavy Electricals Project at Bhopal were delayed, mainly due to foreign exchange difficulties. The heavy machinery, the mining machinery and the foundry forge projects, which should have been far advanced, began to yield some output only at the end of the Third Plan.

Targets of capacity and production in most cases were, however, fulfilled, and in some cases, for example, power-driven pumps, diesel engines, electric motors, electric fans, radio receivers and sugar, the targets were exceeded.

Dispersal of industry was effected by giving preference in the location of public sector projects of relatively backward areas whenever possible. Similarly, in the licensing of private sector projects the claims of under-developed regions were kept in view.

Third Plan and Annual Plans

Industrial progress was markedly uneven during the eight years which comprised the Third Plan (1961-66) and the subsequent Annual Plans (1966-69). In the first four years, conditions were relatively favourable for industrial investment and growth and the progress achieved was significant. Thereafter, for nearly three years the economy was subjected to considerable stress and strain and the growth rate in industrial production declined, first slowly and then steeply, till it reached virtual stagnation. But in the last year of this period, 1968-69, there were distinct signs of recovery.

These vicissitudes may be illustrated with reference to the index of industrial production. The increase in industrial output (1960 as base) was 8.2 per cent in 1961-62, 9.6 per cent in 1962-63, 9.2 per cent in 1963-64 and 8.8 per cent in 1964-65. Thereafter, there was a sharp deterioration in the rate of growth of output. It fell to 5.3 per cent in 1965-66, 0.2 per cent in 1966-67 and 0.5 per cent in 1967-68. The decline in these years was mainly due to low rates of growth in textiles and food industries, on the one hand, and metals and machinery industries on the other. Industrial production, however, showed a sharp recovery during 1968-69 with a rise of 6.2 per cent.

The decline in industrial growth after 1964-65 was attributable to several factors, of which the most important were the series of dislocations caused by the hostilities in 1965 and two successive droughts in 1965-66 and 1966-67. Many industries were severely affected by the shortage of raw materials and components arising from the pause in external aid in 1965.

Among industries in which Third Plan production targets were fully or nearly realised by 1965-66, were aluminium, automobiles, electric transformers, cotton textile machinery, machine tools, sugar, jute textiles, power-driven pumps, diesel engines and petroleum. products. On the other hand, in some of the important industries like steel and fertilizers, there was a considerable shortfall in production. In subsequent years, ithere was a step-up in production in certain industries such as fertlizers, heavy chemicals, cement and petroleum products. All the same, the Third Plan targets for steel and fertilizers were not realised even by 1968-69, the output of finished steel being 47 lakh tonnes in 1968-69 against the Third Plan target of 68 lakh tonnes and of nitrogenous fertilizers being 5,41,000 tonnes against an expected 8,00,000 tonnes.

In spite of this uneven performance, significant achievements

contributing towards the realisation of diversified industrial structure were made during this period. Substantial capacity was created in many new lines. A fairly sound base for future growth was laid. Several of the large projects launched at the commencement of the Third Plan were completed and brought into production. In particular, in the field of heavy engineering and machine-building industries, the commencement of production of the different units in the Heavy Engineering Corporation, Mining and Allied Machinery Corporation and of heavy electrical projects made it possible, largely through indigenous efforts, the expansion of further capacity in vital sectors like iron and steel, mining and power generation. In the field of rail and road transport and communications, virtual self-sufficiency for the supply of equipment and rolling stock was achieved. Machinery manufacturing capacity for a variety of traditional industries like textiles, sugar and cement was developed and design and engineering capabilities were expanded. Process technology was either acquired or developed to enable the planning, designing and construction of industrial projects with maximum indigenous efforts in fields like fertilizers, rayon and dissolving pulp. There was an appreciable increase in the production capacity of steel and non-ferrous metals. Progress was made in the expansion of capacity in petroleum, fertilizer and petro-chemical industries.

Fourth Plan

In the Fourth Plan, the performance of the industrial sector fell short of expectations both in terms of production and investment. Industrial production, which was expected to achieve an annual growth rate of 8 to 10 per cent during the Plan period on the basis of the proposed investment—Rs 3,050 crores in the public sector and Rs 2,250 crores in the private sector—was: 7.3 per cent (1969-70); 3.1 per cent (1970-71); 3.3 per cent (1971-72); and 5.3 per cent (1972-73). In 1973-74 industrial production was almost static. The investment on industrial development in the public sector was estimated to be about Rs 2,700 crores as against the provision of Rs 3,050 crores. While the pace of investment in some of the sectors like iron ore, petroleum and petro-chemicals was generally satisfactory, this was not so in respect of other sectors like iron and steel, non-ferrous metals, fertilizers and coal. In fact, the shortfall in overall investment was much larger, if account was taken of the escalation in project costs.

A number of factors were responsible for the unsatisfactory growth in industrial production. While in some of the critical industries like steel and fertilizers, production remained substantially below the installed capacity on account of operational problems in different units, other agro-based industries like sugar and textiles showed an erratic trend. The inadequate pace of investment resulted in a reduced demand for industrial machinery, adversely affecting the level of output of the capital goods industries. Production in other engineering industries was also hit by the shortage of steel and non-ferrous metals.

On the positive side, there was a substantial production increase in several industries like alloys and special steels, aluminium, automobile tyres, petroleum refinery products, electronics, machine tools, tractors and heavy electrical equipment. The production turnover in the public sector undertakings also showed an encouraging rise towards the closing years of the Plan. Apart from this, the industrial base was further expanded and a greater degree of sophistication and self-reliance achieved. Several of the projects, such as,

steel, non-ferrous metals, fertilizers, tractors, plastics and rubber taken up during the Fourth Plan are expected to add significantly to capacity and production during the Fifth Plan.

Fifth Plan

The Fifth Plan lays emphasis on rapid growth of core sector industries and increase in the production of export-oriented goods and articles of mass consumption. The Plan aims at 8.1 per cent annual growth in the industrial sector. The government decided to put new curbs on the production of inessential goods except for purposes of export. It also took measures to prevent the diversion of scarce materials for the production of such goods. The overall outlay envisaged in the industrial sector including mining is Rs. 13,528 crores—Rs. 8,328 crores in the public sector and Rs. 5,200 crores in the private and co-operative sectors.

Annual Plans (1974-75 and 1975-76)

The Annual Plan (1974-75) which was formulated within the framework of the Draft Fifth Five Year Plan envisaged an outlay of Rs 1,093 crores in the public sectors (later increased to Rs 1,155 crores), bulk of which was allocated for basic industries. Emphasis was also laid on increased output of essential consumer goods.

Despite power shortage, energy crisis, dislocation in rail transport and further rise in prices the industrial growth rate during 1974-75 was estimated to be 3.5 per cent as against 0.5 per cent in 1973-74.

The Annual Plan (1975-76) provides for an outlay of Rs 1643.86 crores.

PUBLIC SECTOR

Over the last two decades, the public sector has emerged as a major factor in the country's economic growth. The public sector in industry comprises: (i) public utilities like the railways, road transport services, ports, posts and telegraphs, power and irrigation projects; (ii) departmental undertakings of the central and state governments, such as, the Chittaranjan Locomotive Works, the Integral Coach Factory at Perambur and various defence production establishments; and (iii) number of other industrial undertakings which derive their finances almost wholly from the central government in the form of equity capital and loans. While (i) and (ii) have been dealt with at length in other chapters of this book and details of the working of (iii) are given later in this chapter, some salient features of this category are given below.

On 31 March 1974, there were 122 central government public

TABLE 18.1 EXPANSION OF INVESTMENT IN PUBLIC SECTOR

Period	Number of enterprises	Investment (Rs crores)	Average annual growth rate per cent
At the commencement of			
First Plan	5	29	—
Second Plan	21	81	36
Third Plan	48	953	233
At the end of the Third Plan (as on 31 March 1966)	74	2,415	31
As on 31 March			
1970	91	4,301	10
1972	101	5,052	8
1973	113	5,571	10
1974 (At the end of the Fourth Plan)	122	6,237	12

undertakings,. Of these, 115 were enterprises producing and selling goods and enterprises rendering services and seven were under construction. The number of such units and the expansion of investment in them since the commencement of the First Five Year Plan is shown in Table 18.1

Investment

Investment (equity and loan) grew from Rs 4,301 crores in 1969-70 to Rs 6,237 crores in 1973-74. Sector-wise distribution of investment is shown in Table 18.2.

TABLE 18.2 SECTOR-WISE DISTRIBUTION OF INVESTMENT IN PUBLIC SECTOR UNDERTAKINGS

(Rs crores)

Category	At the end of 1973-74		At the end of 1972-73	
	Investment	Per cent of total investment	Investment	Per cent of total investment
A. *Enterprises producing and selling goods*:				
Steel	2,028.97	32.5	1,840.27	33.0
Minerals and metals	872.59	14.0	720.84	13.0
Petroleum	360.02	5.8	378.35	6.8
Chemicals and pharmaceuticals	818.11	13.1	690.91	12.4
Heavy engineering	674.81	10.8	657.38	11.8
Medium and light engineering	146.29	2.3	122.50	2.2
Transportation equipment	227.41	3.7	201.20	3.6
Consumer goods	67.42	1.1	52.54	0.9
Agro-based enterprises	9.23	0.1	7.99	0.1
B. *Service enterprises*				
Trading and marketing services	309.04	5.0	292.58	5.3
Transportation services	528.11	8.5	421.96	7.6
Contracts and construction services	15.89	0.3	15.77	0.3
Industrial development and technical consultancy services	4.61	0.1	5.99	0.1
Development of small industries	34.12	0.5	29.64	0.5
Tourist services	17.67	0.3	14.46	0.3
Financial services	89.09	1.4	58.24	1.0
Rehabilitation of sick industries	33.77	0.5	28.58	0.5
Insurance services	—	—	31.50	0.6
TOTAL (A+B)	6,237.15	100.0	5,570.70	100.0

Turnover

Total turnover of the undertakings amounted to Rs 6,777 crores during 1973-74 as against Rs 5,299 crores in the previous year, registering an increase of 28 per cent. The pattern of turnover in the enterprises during 1972-73 and 1973-74 is given in Table 18.3.

Exports

The value of exports by public sector undertakings during 1973-74 was Rs 75 crores as against Rs 77 crores in the preceding year. Foreign exchange earned by other than through exports (ship repairs, freight earnings), amounted to Rs 179 crores in 1973-74 as against Rs 125 crores in 1972-73 The value of exports canalised through trading concerns rose from Rs 301 crores in 1972-73 to Rs 439 crores during 1973-74. Some of the products exported were industrial boilers, electronic instruments, teleprinters, telephone exchange equipment and machine tools.

Profit

The gross profit earned by the enterprises after providing for depreciation, but before interest and tax earned during 1973-74 worked out

TABLE 18.3
TURNOVER IN THE ENTERPRISES

(*Rs crores*)

Category	1973-74	1972-73	Percentage increase in 1973-74 over 1972-73
A. *Enterprises producing and selling goods*:			
Steel	721.93	605.14	19.3
Minerals and metals	369.58	163.97	125.6
Petroleum	1,562.81	1,201.57	30.0
Chemicals and pharmaceuticals	249.95	202.50	23.1
Heavy engineering	263.33	217.58	20.6
Medium and light engineering	200.35	156.09	28.2
Transportation equipment	181.91	171.19	6.4
Consumer goods	30.53	22.09	40.9
Agro-based enterprises	10.46	8.77	11.1
B. *Service Enterprises*			
Trading and marketing service	2,711.27	2,163.48	25.3
Transportation services	336.32	275.83	21.7
Contracts and construction	67.84	67.61	0.3
Industrial development and technical consultancy services	19.82	6.75	185.7
Small industries development	22.04	14.87	46.6
Tourist services	12.09	9.14	33.3
Financial services	9.18	5.82	50.0
Rehabilitation of sick industries	7.19	6.65	8.1
TOTAL (A+B)	6,776.60	5,299.05	28.0

to Rs 272.49 crores. Net profit after payment of interest and tax was Rs 64.42 crores. Seventy three enterprises contributed profits totalling Rs 160.75 crores and 41 enterprises, losses aggregating Rs 96.33 crores.

Generation of Resources

It was mainly due to sustained improvement that the public sector enterprises could achieve noteworthy growth rate of generation of internal resources. During the Fourth Plan period they generated Rs 1,260 crores against the target of Rs 1,265 crores. During 1973-74, internal resources comprising depreciation and retained profits worth Rs 387 crores were generated.

Their contribution to public exchequer was Rs 771 crores during 1973-74 and Rs 3,120 crores during the Fourth Plan period.

Employment

The number of persons in the employment of the enterprises was 13.14 lakhs in 1973-74 as against 9.32 lakhs in 1972-73 registering an increase of 41 per cent. Salaries and wages paid to the employees totalled Rs 786.4 crores and the average annual emoluments per employee were Rs 5,983 in 1973-74 as against Rs 5,804 in 1972-73.

Employee's Welfare

A number of enterprises have built townships and housing colonies for their employees. They also provide educational facilities for the children of the employees through their own schools. The expenditure on the maintenance of townships during 1973-74 was Rs 23.78 crores and on social overheads like provision of educational and medical facilities Rs. 28.73 crores. The employees also enjoy benefits of provident fund, leave concession, medical and other amenities, retirement gratuity and bonus.

INDUSTRIAL PRODUCTION

Production in selected industries in different years since 1950-51 is given in Table 18.4. The index numbers (base: 1960=100) of industrial production for selected years since 1951 are given in Table 18.5.

TABLE 18.4

PROGRESS OF INDUSTRIAL PRODUCTION (SELECTED INDUSTRIES)

	Industry (unit)	1950-51	1960-61	1965-66	1969-70	1972-73	1973-74	1974-75[1]
1	2	3	4	5	6	7	8	9
I.	*Mining*							
	1. Coal (including lignite) (lakh tonnes)	328	557	703	800	793	811	899
	2. Iron ore (lakh tonnes)[2]	30	110	181	213	240	228	222
II.	*Metallurgical Industries*							
	3. Pig iron (lakh tonnes)	16.9	43.1	70.9	73.9	72.7	70	74.8
	4. Steel (lakh tonnes)	14.7	34.2	65.3	64.3	62.8	57.6	62.7
	5. Finished steel (lakh tonnes)	10.4	23.9	45.1	48	50.2	44.8	49
	6. Steel castings ('000 tonnes)	—	34	57	46	70	55	60
	7. Aluminium (virgin metal) ('000 tonnes)	4	18.3	62.1	135.1	173.7	147.9	126.6
	8. Copper (virgin metal) ('000 tonnes)	7.1	8.5	9.4	9.8	12.1	12.7	15.1
III.	*Mechanical Engineering Industries*							
	9. Machine tools (Rs crores)	0.3	7	29.4	32.9	62.6	69.2	N.A.
	10. Railway wagons ('000 no.)[3]	2.9	11.9	33.5	14.9	10.8	12.2	11.1
	11. Automobiles ('000 no.)[4]	16.5	55	70.7	79.8	89.7	99.8	84.1
	(i) Commercial vehicles ('000 no.)[5]	8.6	28.4	35.3	35.4	38.4	42.9	40.7
	(ii) Passenger cars etc. ('000 no.)	7.9	26.6	35.4	44.3	51.3	56.9	43.4
	12. Motor cycles and scooters ('000 no.)	—	19.4	40.7	91	116.7	124	149
	13. Power-driven pumps ('000 no.)	35	109	244	359	278	336	251
	14. Diesel engines (stationary) ('000 no.)	5.5	44.7	93.1	134.2	92.8	137.2	112.5
	15. Bicycles ('000 no.)	99	1,071	1,574	1,976	2,400	2,574	2,358
	16. Sewing machines ('000 no.)	33	303	430	340	334	258	282
IV.	*Electrical Engineering Industries*							
	17. Power transformers (lakh kva)	1.8	14.1	44.6	56.6	97.1	89.2	88
	18. Electric motors ('000 hp)	99	728	1,753	2,283	2,768	2,856	2,976
	19. Electric fans (lakh no.)	2	10.6	13.6	15.5	24.7	21	21.2
	20. Electric lamps (lakh no.)	140	435	721	988	1,436	1,322	1,467
	21. Radio receivers ('000 no.)	54	282	606	1,746	1,826	1,776	2,052
	22. Electric cables and wires							
	(i) Aluminium conductors ('000 tonnes)	1.7	23.6	40.6	61.2	77	46.4	36
	(ii) Bare copper conductors ('000 tonnes)	5	10.1	3.1	2.1	1	1.4	1.2

TABLE 18.4 (Continued)

1	2	3	4	5	6	7	8	9
V.	*Chemical & Allied Industries*							
23.	Nitrogenous fertilizers ('000 tonnes of N)	9	98	233	716	1,059	1,060	1,184
24.	Phosphatic fertilizers ('000 tonnes of P_2O_5)	9	52	111	222	326	373	311
25.	Sulphuric acid ('000 tonnes)	101	368	662	1,197	1,226	1,353	1,292
26.	Soda ash ('000 tonnes)	45	152	331	427	483	449	516
27.	Caustic soda ('000 tonnes)	12	101	218	354	391	424	428
28.	Paper & paper board ('000 tonnes)	116	350	558	723	733	766	826
29.	Rubber tyres							
	(i) Automobile tyres (lakh no.)	8.7	14.4	23.1	36.2	43	46.5	48.8
	(ii) Bicycle tyres (lakh no.)	33	111.5	184.6	213.2	208.6	239.4	244.2
30.	Cement (lakh tonnes)	27.3	79.7	108.2	138	155	146.7	146.5
31.	Refractories ('000 tonnes)	237	567	695	635	773	697	737
32.	Petroleum products refined (lakh tonnes)	2	58	94	166	179	196	193
VI.	*Textile Industries*							
33.	Jute textiles ('000 tonnes)	837	1,097	1,302	944	1,074	948	911
34.	Cotton yarn (crore kg)	53.4	80.1	90.7	96.2	97.2	100	103
35.	Cotton cloth (crore metres)	421.5	673.8	744	775.3	787.9	794.6	N.A.
	(i) Mill sector (crore metres)	340.1	464.9	440.1	419.2	421	408.3	443.7
	(ii) Decentralised sector (crore metres)	81.4	208.9	303.9	356.1	366.9	386.3	N.A.
36.	Rayon yarn ('000 tonnes)[6]	2.1	43.8	75.6	98.8	113.1	101.8	116.4
37.	Art silk fabrics (crore metres)	28.7	54.4	87.8	86.3	91.8	84.6	N.A.
38.	Woollen manufactures							
	(i) Woollen and worsted yarn (lakh kg)	87	130	170	188	N.A.	N.A.	N.A.
	(ii) Woollen and worsted fabrics (lakh metres)	61	133	92	122	N.A.	N.A.	N.A.
VII.	*Food Industries*							
39.	Sugar (Oct.-Sept.) (lakh tonnes)	11.3	30.3	35.1	42.6	38.8	39.5	44.6[7]
40.	Tea (crore kg)	27.7	32.2	37.6	40.1	44.6	46.7	48.2
41.	Coffee ('000 tonnes)	21	54.1	62.1	64.6	71.8	87	N.A.
42.	Vanaspati ('000 tonnes)	170	340	401	477	580	448	351
VIII.	*Electricity generated* (crore kwh)[8]	530	1,690	3,300	5,200	6,360	6,640	5,898

1 Provisional. 2 Excludes output in Goa. 3 Excludes output in railway workshops.
4 Includes landrovers, jeeps, utilities, station wagons and vans. 5 Includes buses, trucks, tempos and three and four wheelers.
6 Includes viscose yarn, staple fibre and acetate yarn. 7 Relates to October 1974-April 1975. 8 Relates to public utilities only.
N.A.—Not available.

TABLE 18.5

INDEX NUMBERS OF INDUSTRIAL PRODUCTION

(Base : 1960=100)

Group	1951	1961	1966	1971	1972	1973	1974 January-July	% Change in Jan.-July 1974 over Jan.-July 1973
General Index	54.8	109.2	153.2	186.1	199.4	200.7	201.8	+ 2.3
Mining & quarrying ..	66.6	105.4	136.1	153.4	164.2	163.6	175.8	+ 5.5
Food manufacturing ..	66.9	108.6	130.5	157.6	162.6	154.5	152.8	+ 1.1
Beverages & tobacco	58.0	107.0	158.9	182.5	174.1	178.9	189.1	+ 9.9
Textiles ..	79.7	102.8	108.9	106.0	114.4	113.3	108.9	—
Cotton textiles	N.A.	104.8	106.5	105.2	112.6	114.1	112.1	+ 3.3
Jute textiles	N.A.	89.1	100.4	94.7	96.8	90.6	75.5	— 16
Footwear (leather) ..	63.5	115.4	184.2	168.1	150.8	151.3	135.2	— 12
Wood & cork, except furniture	43.5	95.5	205.1	224.1	217.7	158.4	157.1	— 0.7
Paper & paper products ..	38.5	105.8	160.0	225.7	226.1	236.4	246.9	+ 8.8
Leather & fur products ..	72.4	100.9	120.9	55.3	59.9	76.4	75.9	+ 2.8
Rubber products	56.1	112.9	160.2	241.8	256.0	250.6	269.0	+ 14
Chemicals & chemical products ..	42.4	113.4	168.4	252.7	293.8	301.9	301.8	+ 0.6
Petroleum refinery products ..	11.0	106.0	195.9	316.9	317.2	332.8	350.0	+11.4
Non-metallic mineral products ..	39.0	106.9	148.1	207.6	225.2	226.6	231.2	+ 4.6
Basic metal industries	46.5	118.7	191.5	208.6	225.3	215.8	203.6	— 7.1
Metal products	30.7	112.4	208.4	234.4	242.7	240.5	260.9	+ 4.6
Machinery except electrical machinery ..	22.2	121.2	295.6	373.2	402.7	454.9	440.8	— 1.2
Electrical machinery, apparatus, appliances, etc.	26.3	110.0	225.1	404.8	435.0	436.2	432.0	+ 0.7
Transport equipment	19.6	116.7	156.0	122.1	133.4	148.1	146.8	— 1.3
Miscellaneous manufacturing industries	N.A.	102.7	132.2	114.0	86.5	74.5	101.9	+75.1
Electricity generated ..	35.7	116.3	207.8	358.5	390.7	383.8	405.8	+ 9.1

N.A.—Not Available.

Note: Groupwise indices with base 1960=100 are not published from August 1974 onwards as the base period for compilation of the index numbers has been changed to 1970.

The general index for 1973 was 200.7 showing a growth rate of 0.7 per cent over 1972 as against a growth rate of 7.1 per cent registered during 1972 over 1971 and 1.0 per cent during 1971 over 1970. Data available up to September 1974 show that the growth rate during 9 months of 1974 was 2.1 per cent over the corresponding period of 1973.

PRINCIPAL INDUSTRIES

COTTON TEXTILES

The origin of the cotton textile industry, the largest single industry in the country, dates back to 1818 when the first cotton mill was established at Fort Gloster near Calcutta. The grant of protection and the Swadeshi movement enabled the industry to make rapid strides. The number of mills increased to 389 in 1939 with 2,02,464 looms. At the end of 1974 there were 691 mills (403 spinning and 288 composite) with an installed capacity of 188.6 lakh spindles and 2.07 lakh looms. In 1947, cotton yarn production was 59.7 crores kg and piecegoods production 350.9 crore metres. The production of cotton yarn in 1974 was 100.69 crores kg and that of cotton cloth 431.6 crore metres. The decentralised sector of handlooms and powerlooms produced another 396.8 crore metres of cotton cloth.

Production of cotton yarn and cloth since 1950-51 is shown in Table 18.4.

JUTE

The jute industry is one of the oldest in the country. As a major foreign exchange earner it occupies an important place in the country's economy. The first power-driven jute mill was established at Rishra near Calcutta in 1859 and thereafter the industry made rapid progress. The partition of the country in 1947 deprived the industry of its vital raw material and reduced the number of mills to 106. Production in 1947-48 was only 16.5 lakh bales as against the pre-partition output of 65-70 lakh bales. In 1973-74, production of raw jute reached a record level of 80 lakh bales but came down to 55 lakh bales in 1974-75 on account of short crop. Production of jute goods which was 10,74,400 tonnes in 1973-74 was lower during 1974-75 and stood at 10.55 lakh tonnes. The value of export of jute goods, however, during 1974-75 was Rs 287.56 crores as against Rs 226.79 crores during the previous year. Table 18.4 shows the progress of the jute industry since 1950-51.

The Jute Corporation of India was set up in 1971 to manage the export, import and internal marketing of raw jute. During 1974-75 it was able to stabilise the prices of raw jute particularly in some areas of Assam and Tripura.

SUGAR

The sugar industry ranks second among the major agro-industries. It received great impetus after the grant of protection in 1932. The number of factories went up from 138 in 1950-51 to 245 in 1974-75. Similarly, production increased from 11.34 lakh tonnes in 1950-51 to 39.48 lakh tonnes in 1973-74. During 1974-75 (October-September) production up to 15 June 1975 was 47.38 lakh tonnes as against 38.28 lakh tonnes for the corresponding period of previous year. Sugar exports during 1973-74 were 4.05 lakh tonnes as compared to 97,000 tonnes in 1972-73. During 1974-75 season, 5.67 lakh tonnes were exported up to 31 May 1975. A feature of the development of the sugar industry after 1947 has been its remarkable expansion in the co-operative sector. Out of 229 factories in 1973-74, 90 were in the co-operative sector and produced about 37.5 per cent of the sugar output.

The progress of the industry since 1950-51 is shown in Table 18.6.

TABLE 18.6
GROWTH OF SUGAR INDUSTRY

	1950-51	1960-61	1965-66	1972-73	1973-74	1974-75[1]
Number of mills	138	174	200	228	229	245
Production ('000 tonnes)[2]	1,134	3,021	3,541	3,873	3,948	4,738[3]

[1] Provisional. [2] Up to 1966-67, the sugar year was November-October but later it was changed to October-September. [3] Up to 15 June 1975.

CEMENT

Manufacture of cement was first started in Madras in 1904. A real beginning on a large scale, however, was made in 1912-13 when three companies were formed. At present, there are 54 cement factories, 9 in the public sector, with a total installed capacity of about 2.06 crore tonnes per annum. Total production of cement (all varieties) in 1974 was 1.43 crore tonnes as compared to 27 lakh tonnes in 1950-51.

The Cement Corporation of India, New Delhi, is the only public sector undertaking in the central sector so far as the cement industry is concerned. It has two factories, one in Karnataka and the other in Madhya Pradesh. Both have a capacity of two lakh tonnes each per annum. Two more factories at Bokajan in Assam and Paonta in Himachal Pradesh, each with a capacity of two lakh tonnes per annum are under construction and are likely to go into production in 1976 and 1977 respectively.

The growth of the industry is traced in Table 18.4.

Asbestos Cement

The installed capacity of asbestos cement products is 5.6 lakh tonnes spread over nine units. Production in 1974 was about 4.21 lakh tonnes as compared to 4.03 lakh tonnes in 1973.

PAPER AND PAPER BOARD

Production of machine-made paper in India dates back to 1870, when the Bally Mills was established near Calcutta. Between 1939 and 1945 the number of mills increased to 15 and production reached 1,03,884 tonnes (1944). Rapid progress has been made since 1950. There are at present 70 paper mills with a total capacity of 10 lakh tonnes per annum. Production in 1974 was estimated at 8.37 lakh tonnes as against 1.09 lakh tonnes in 1951. A number of schemes are in hand and a further capacity of about 58,000 tonnes is expected to materialise in 1975. The progress of the industry is shown in Table 18.4.

The Hindustan Paper Corporation Ltd., New Delhi, a public sector undertaking, was set up in 1970 to establish pulp and paper projects in the country. The Corporation has drawn up plans to set up three pulp and paper projects and one newsprint project. The Nagaland pulp and paper project with a capacity of 33,000 tonnes per annum of pulp and writing and printing paper is expected to go into production in 1977. The other two units, namely, the Nowgong pulp and paper project and the Cachar pulp and paper project, when set up, will have a capacity of one lakh tonnes each of paper and pulp per annum. The Kerala newsprint project of the Corporation on which work was started in 1975 at Velloor will have an installed capacity of 80,000 tonnes per annum of newsprint.

Newsprint

The National Newsprint and Paper Mills Ltd., Nepanagar in Madhya Pradesh, the only newsprint mill in the country, went into production in 1955. The mill, which is in the public sector, has an installed capacity of 30,000 tonnes per annum. An expansion programme was implemented in 1975 to raise its capacity to 75,000 tonnes annually. The estimated production in 1974-75 was about 55,000 tonnes as compared to 48,000 tonnes in 1973-74.

PHOTO PAPER AND FILMS

The Hindustan Photo Films Manufacturing Co. Ltd., was set up at Ootacamund in 1960 by the Government of India for the manufacture of cine, X-ray, roll and graphic art films and photo paper. The project has an installed capacity of 61.5 lakh sq. metres. During 1974-75 it produced 47 lakh sq. metres of various kinds of photographic materials valued at Rs 13.88 crores as against 35 lakh sq. metres valued at Rs 6.93 crores in 1973-74. In 1973-74 it produced 16.09 lakh sq. metres of cine film positive. For the first time during 1974-75 the company took up the production of cine colour films positive by conversion of imported jumbo rolls.

IRON AND STEEL

The earliest successful attempt to manufacture iron and steel by modern methods was made in the country in 1874. But the first efforts at large-scale production got under way when the Tata Iron and Steel Company (TISCO) was set up at Jamshedpur in 1907. This was followed by the establishment of the Indian Iron and Steel Company (IISCO) at Burnpur in 1919. The first unit in the public sector, now known as the Visvesvaraya Iron and Steel Works, Ltd., started functioning at Bhadravati in 1923. After Independence, the development of the steel industry was considered during the First Plan but it was only in the Second Plan (1956-61) that work was started to set up three integrated steel projects each with 10 lakh ingot tonnes capacity at Bhilai, Durgapur and Rourkela. An expansion programme to double the capacity of the two private sector steel plants, namely, TISCO and IISCO, to 20 lakh tonnes and 10 lakh tonnes respectively was also taken in hand. The three plants in the public sector came into operation in stages between 1956 and 1962 and the expansion of the private sector factories was completed in 1959. In the Third Plan, the emphasis was on expansion of the three public sector steel plants and the setting up of a new steel works at Bokaro. The Fourth Plan steel programme was based on the maximum utilization of existing steel capacity and preparation of plans to set up three new steel plants at Salem (Tamil Nadu), Vijayanagar (Karnataka) and Vishakhapatnam (Andhra Pradesh) to create additional steel capacity to meet the requirements in the Fifth Plan.

There are at present six integrated steel plants in the country, four in the public sector and two in the private sector. Of the private sector plants, the management of the Indian Iron and Steel Company was taken over by the central government in 1972. In the Fifth Plan emphasis would be laid on the expansion of the capacity of Bokaro plant to 40 lakh tonnes and then to 47.5 lakh tonnes.

Table 18.7 shows the capacity of the six integrated steel plants.

TABLE 18.7 RATED CAPACITY OF STEEL PLANTS

('000 *tonnes*)

Plant	Rated capacity	
	Ingot steel	Saleable steel
Public sector		
Bhilai	2,500	1,965
Durgapur	1,600	1,239
Rourkela	1,800	1,225
Bokaro[1]	1,700	1,364
Private sector		
TISCO	2,000	1,500
IISCO	1,000	800
TOTAL	10,600	8,093

[1] Relates to the first stage of the Bokaro plant which is under construction.

Capacity has also been created for the manufacture of alloy, tool and special steels. The Alloy Steels Plant, Durgapur, with a capacity of 60,000 tonnes and the Visvesvaraya Iron and Steel Ltd. with a capacity of 77,000 tonnes are two of the major producers. Other manufacturers include Mahindra Ugine Steel Company Ltd. at Khopoli near Bombay and Guest Keen Williams Ltd., Calcutta. In addition, a new alloy steel plant at Patratu in Bihar with a capacity of 40,000 tonnes has been commissioned.

Electric arc furnaces have also been permitted to diversify their produce into low alloy steels and special steels of certain specified categories.

Enough capacity has been created by setting up mini-steel plant and re-rolling mills. A number of letters of intent have been issued in the State sector to produce sponge iron to meet the growing requirement of scrap for electric arc furnaces industry.

SAIL

To co-ordinate the development of the iron and steel industry both in public and private sectors, the Government of India set up the Steel Authority of India Ltd. (SAIL) in 1973. SAIL owns all the shares in the public sector corporations connected with steel and associated industries like coking coal, iron ore and manganese ore as well as all government shares in the private sector companies. It also acts as the nominee of public sector financial institutions, which hold shares in private sector companies for steel and associated input industries, refractory units and smaller steel producing organisations.

Hindustan Steel Ltd.

The management of three public sector steel plants, namely, Bhilai, Durgapur and Rourkela is vested in the State-owned Hindustan Steel Ltd., a subsidiary of SAIL. It also owns 5 coal washeries, one at Durgapur, two at Dugda, and one each at Patherdih and Bhojudih for the supply of washed coal to the steel plants in public sector.

Production of ingot steel, saleable steel and pig iron for sale from the integrated steel plants in 1973-74 and 1974-75 is shown in Table 18.8.

TABLE 18.8
PRODUCTION OF IRON AND STEEL

('000 tonnes)

Plant	Ingot steel		Saleable steel		Pig iron for sale	
	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75
Bhilai	1,894	2,001	1,682	1,693	506	535
Durgapur	776	819	377	520	100	127
Rourkela	1,081	1,066	736	812	46	101
Bokaro	18	122	—	—	664	603
TISCO	1,514	1,722	1,200	1,461	—	—
IISCO	439	532	358	414	—	—
TOTAL	5,722	6,262	4,353	4,900	1,316	1,366

Bokaro Steel Ltd.

The Bokaro Steel Ltd., a subsidiary of SAIL, manages the fourth steel plant in the public sector which is being set up at Bokaro. It will have a capacity of 17 lakh ingot tonnes in the first stage and 40 lakh ingot tonnes in the second stage. A recent study showed that the capacity of the plant can be expanded to about 100 lakh ingot tonnes annually. A feasibility study is being prepared for this expansion.

The first stage, which is estimated to cost about Rs 941 crores, is nearing completion. The second stage, which is likely to cost about Rs 948 crores, is expected to be completed by 1977.

New Steel Plants

Three new steel plants are to be set up at Salem (Tamil Nadu), Vijayanagar (Karnataka) and Vishakhapatnam (Andhra Pradesh).

The Salem plant is being planned for the production of 1,95,000 tonnes of sheet and strip products, comprising 70,000 tonnes of stainless steel, 75,000 tonnes of electrical steel and 50,000 tonnes of other special steels. A new company under the name of Salem Steel Ltd. (now a subsidiary of SAIL) was set up in 1972 for implementing this project. The Vijayanagar and Vishakhapatnam steel projects are being planned for an ultimate capacity of 30 lakh ingot tonnes each. While the Vijayanagar steel project will produce strip products and billets, the Vishakhapatnam steel project will be designed for the production of sectional products.

Preliminary work is in progress at the project sites. The first phase of the Salem steel plant for the production of about 30,000 tonnes of cold rolled stainless steel sheets is expected to be commissioned in the Sixth Plan. The other two projects are likely to be completed towards the end of the Sixth Plan.

Projected Demand for Steel and Pig Iron

The total demand for pig iron in 1974-75 is estimated to be about 15 lakh tonnes including the requirements of electric arc furnaces for melting purposes. This is expected to increase gradually to 20 lakh tonnes by the end of the Fifth Plan.

The total domestic demand for finished steel, which was 58 lakh tonnes in 1973-74, is expected to rise to 94 lakh tonnes in 1978-79. The development programme for steel for the Fifth Plan has been framed accordingly. Exports during 1974-75 totalled 1,38,551 tonnes of pig iron and 52,137 tonnes of steel valued at Rs 7.70 crores and Rs 10.93 crores respectively.

SAIL International Ltd, set up in June 1974, was appointed canalising agency for export of iron and steel materials with effect from 23 July 1974.

MECON

To provide consultancy and engineering services in the field of iron and steel, the Central Engineering and Design Bureau of Hindustan Steel Ltd. was incorporated in 1973 as an independent company—the Metallurgical and Engineering Consultants (India) Ltd. The company, which is a subsidiary of SAIL, also functions as a consultant to a number of organisations.

ENGINEERING INDUSTRY

The engineering industries were started only after India attained Independence. But, today, India has not only become self-reliant in a variety of engineering equipment but is also exporting engineering goods. The country is currently producing power generation, transmission and distribution equipment, plant and machinery for steel, chemical and fertilizer plants, electrical and construction machinery, machine tools, railway rolling stock, commercial vehicles, earth-moving equipment and agricultural equipment and a large number of other items (see Table 18.4).

Export of Engineering Goods

In 1974-75 the engineering industries produced goods worth Rs 3,600 crores. The progress made over the years is indeed remarkable as the output from the light and medium industries in 1950-51 was of only Rs 50 crores. Export of engineering goods in 1974-75 touched an all time high figure of Rs 312 crores as against only Rs 6 crores in 1950-51.

Heavy Engineering, Heavy Mechanical and Industrial Machinery

There are a large number of units in the public and private sectors which are manufacturing steel plant equipment.

The major unit in public sector manufacturing steel plant equipment, namely, the Heavy Engineering Corporation Ltd., Ranchi was incorporated in 1958. It has three units: Heavy Machine Building Plant, Foundry Forge Plant and Heavy Machine Tools Plant. The value of production of the three units during 1974-75 was Rs 65 crores as against Rs 46 crores in 1973-74

The Triveni Structurals Ltd. was set up at Naini, Allahabad, in 1965 to promote designing and manufacture of sophisticated steel structures. The value of production during 1974-75 was Rs 5.3 crores.

The Tungabhadra Steel Products Ltd. at Tungabhadra Dam, Karnataka, manufactures structurals, transmission towers and penstock pipes. The value of production during 1974-75 was Rs 2.1 crores.

The Bharat Heavy Plate and Vessels Ltd.,Vishakhapatnam, was set up in 1966 for manufacturing a range of fabricating equipment required by the fertilizer and other processing industries, petroleum, petrochemicals and other heavy chemicals and allied industries. The value of production during 1974-75 was Rs 11.2 crores.

The Jessop and Co. Ltd. and the Richardson & Cruddas Ltd., both public sector undertakings, produced equipment worth Rs 35.5 crores and Rs 8 crores respectively during 1974-75.

Heavy mechanical industries produce, among other things, cranes, steel structurals, transmission towers, and conveyors. Production of cranes during 1974-75 was about 13,000 tonnes. Conveyors worth Rs 18.67 crores were produced during 1974.

The coal mining machinery industry is now in a position to meet practically the entire requirements of the industry. A wide variety of articles like coal cutters, loaders, haulages, winders, coal combines, shuttle cars and mine locomotives are being manufactured by the public sector unit, the Mining and Allied Machinery Corporation Ltd. (MAMC) at Durgapur, and a number of private sector units. The value of production during 1974-75 was Rs 23.01 crores.

The estimated value of production of some selected industrial machinery for 1974 was: Chemical and pharmaceutical machinery Rs 40.50 crores, sugar mill machinery Rs 22.50 crores, cement machinery Rs 10 crores, dairy machinery Rs 4.42 crores and printing machinery Rs 1.5 crores.

Light Mechanical Industries

Some of the important products of the light mechanical industries are bicycles and bicycle parts, balls and roller bearing, typewriters, timepieces and wrist watches, data processing machines, agricultural implements and light machinery. The value of production for 1974 and 1973 of some of these industries was: bicycles: Rs 54 crores and 44.23 crores; ball and roller bearings: Rs 36 crores and Rs 32.51 crores; data processing machines: computers Rs 4.35 crores and Rs 2.28 crores; unit record machines Rs 7.68 crores and Rs 5.58 crores; time-pieces: Rs 3.20 crores and Rs 2.21 crores; agricultural implements (manually operated and animal-driven): Rs 6.88 crores and Rs 10.50 crores.

Machine Tools

The upward trend in the production of machine tools was maintained in 1974-75. One hundred and fifteen major units produced machine tools valued at Rs 75 crores and machine tools worth Rs 4.5 crores were exported during 1974-75.

Some of the important public sector undertakings manufacturing machine tools are described below.

The Hindustan Machine Tools Ltd., Bangalore, is a multi-unit company. It has units at Bangalore, Pinjore (Haryana), Kalamassery (Kerala), Hyderabad and Srinagar. The company has watch factories at Bangalore and Srinagar.

The Central Machine Tools Institute, Bangalore, which went into production in 1965, is the primary research institute in the field of machine tools in the country. Its other functions include designing, standardisation, training and documentation.

The Machine Tool Corporation of India, Ajmer, was incorporated in 1967 for setting up a grinding machine tool plant at Ajmer. The company commenced commercial production in 1970. During 1974-75, the value of production was Rs 2.5 crores.

The Heavy Machine Tools Plant at the Heavy Engineering Corporation produced machine tools worth Rs 5.5 crores during 1974-75.

Light Electrical Industries

Production of light electrical industries maintained an upward trend. Estimated production of a few selected items in 1974 are: G.L.S. and other lamps Rs 16.08 crores, fluorescent lamps Rs 9.1 crores and miniature lamps Rs 1.68 crores (estimated.)

Heavy Electrical Industries

Apart from Bharat Heavy Electricals Ltd (BHEL) and some other public sector undertakings under the state governments, there are several large private sector units which are producing a large number of items for the heavy electricals industry. BHEL, which is a central public sector undertaking, was incorporated in 1964. It consists of four units, namely, Bhopal, Tiruchirappalli, Hyderabad and Hardwar. Two more, one at Jhansi and the other at Hardwar are under construction.

In 1974-75 it achieved production of Rs 310 crores as against Rs 231 crores in 1973-74. BHEL is exporting power station equipment to Malaysia and a number of countries in the West Asia and Africa. During 1974-75 it exported power station equipment worth Rs 4.16 crores.

The Hindustan Cables Ltd. in their factory at Rupnarainpur, West Bengal, began production in 1954. The factory, which is in the public sector, produced 6.89 lakh conductor km of dry core cables, 3,300 tube km of coaxial cables and 60,454 conductor km of plastic wires and cables during 1974-75. The value of output of all items in 1974-75 totalled Rs 22.14 crores as compared to Rs 15.19 crores in 1973-74. The Company's second unit at Hyderabad commenced production in April 1974. It produced 1.15 lakh conductor km of dry core cables of value Rs 1.99 crores.

Instruments

Nine units produce industrial process control instruments. The value of production showed a marginal increase from Rs 8.02 crores in 1973 to Rs 8.1 crores in 1974. Production of scientific surveying, optical and mathematical instruments also went up from Rs 5 crores in 1973 to Rs 6.4 crores in 1974 and that of X-ray and electromedical equipment increased from Rs 3.5 crores to Rs 3.6 crores in the same period. A brief description of the major public sector undertakings manufacturing various types of instruments is given below.

Instrumentation Ltd., Kota, incorporated in 1964, manufactures various industrial process control instruments. It went into commercial production in 1968 and achieved a production value of Rs 3.5 crores and Rs 3.4 crores (estimated) in 1973 and 1974 respectively. The

undertaking is also executing the supply of instrumentation systems to Malaysia.

The National Instruments Ltd., Calcutta, manufactures various types of surveying, meteorological, scientific and industrial instruments. Its production during 1973 and 1974 was of Rs 2.2 crores and Rs 3.3 crores respectively.

Automobiles and Tractors

In 1974, production of commercial vehicles including jeeps was 51,299. The figures for the year were as follows: passenger cars 36,256, scooters 85,670, motor-cycles 54,125. Scooters India Ltd. Lucknow, a public sector undertaking with a capacity of one lakh scooters per annum went into production in 1974-75.

There are 11 units manufacturing tractors. The total output during 1974 was 29,052 as against 23,497 in 1973.

DRUGS AND PHARMACEUTICALS AND CHEMICALS

Before, 1947 most of the bulk drugs were imported and only processing and formulations were done in India. Since then, most of the bulk drugs are manufactured indigenously and the drugs industry has attained the status of a major industry. The value of drugs and pharmaceuticals produced during 1974-75 was about Rs 400 crores as compared to Rs 12 crores in 1948. To reduce the import of bulk drugs and to have an orderly development of the industry, two public sector projects have been set up. They are the Indian Drugs and Pharmaceuticals Ltd. and the Hindustan Antibiotics Ltd. The two undertakings contribute about 35 per cent of the bulk production and 6 to 8 per cent of formulations production in the country. For the production of organic chemicals and organic formulations, the Hindustan Organic Chemicals Ltd. and the Hindustan Insecticides Ltd. have been established. A brief description of the four undertakings is given below.

Indian Drugs and Pharmaceuticals Ltd.

The Indian Drugs and Pharmaceuticals Ltd., New Delhi, was set up in 1961 to manufacture a variety of antibiotics and wide range of drugs from the very basic stages. It comprises the following three units. (i) *Antibiotics Plant, Rishikesh:* The plant produces, among others, penicillin, streptomycin, tetracycline and nystatin. Production was 1,44,553 milliards in 1974-75 as against 1,21,128 milliards in 1973-74. (ii) *Synthetic Drugs Plant, Hyderabad:* It produces a wide range of sulphas, vitamins, analgesics and anti-TB drugs. Production in 1974-75 was 1,267 tonnes as against 1,305 tonnes in the preceding year. (iii) *Surgical Instruments Plant, Madras:* The plant manufactures different types of surgical instruments. Its production during 1974-75 was 2,82,818 instruments valued at Rs 50.25 lakhs as against 3,62,822 instruments valued at Rs 37.50 lakhs in 1973-74.

Hindustan Antibiotics Ltd.

The Hindustan Antibiotics Ltd., Pune, was incorporated in 1954. It undertakes basic manufacture of penicillin, streptomycin, hamycin and vitamin C. The production of penicillin and streptomycin was 63.02 mmu and 63,426 kg during 1974-75 as against 75.12 mmu and 64,027 kg in the preceding year.

Hindustan Organic Chemicals Ltd.

The Hindustan Organic Chemicals Ltd., Rasayani (Maharashtra) incorporated in 1960, manufactures various organic chemicals and intermediates required by drugs, dyestuffs and plastic industries. At present it manufactures 12 chemical groups. Their production during 1974-75 was 49,809 tonnes.

Hindustan Insecticides Ltd.

The Hindustan Insecticides Ltd., New Delhi, incorporated in 1954, is a major producer of insecticides like DDT. It has two factories at Delhi and Alwaye (Kerala). Production of DDT (Technical) at Delhi and Alwaye factories during 1974-75 was 2,309 and 1,377 tonnes respectively. The Alwaye unit also produces BHC and its production during 1974-75 was 1,695 tonnes.

PETRO-CHEMICALS

Two petro-chemical complexes of the Union Carbide India Ltd. and National Organic Chemicals Ltd. (private sector undertakings) started production in 1967 and 1968 respectively. To step up the establishment of petro-chemical complexes around the public sector refineries, the Indian Petro-chemicals Corporation Ltd. (IPCL) was set up at Jawaharnagar in Gujarat in 1969 as a wholly owned company of the Government of India. The DMT unit of its aromatics plant produced 13,447 tonnes of DMT in 1974-75. The xylene plant, which went into production in 1973, produced 1,644 tonnes of mixed xylene and 7,912 tonnes of ortho-xylene during 1974-75.

A separate company, Bongaigaon Refinery and Petrochemicals Ltd. registered in 1974 is to implement the refinery and petrochemical complex at Bongaigaon.

Production of plastics in the country was 1,16,000 tonnes in 1974. Synthetic fibre production was 20,000 tonnes and synthetic rubber production was 17,918 tonnes in 1974.

FERTILIZERS

The fertilizer industry in India is of comparatively recent origin. In spite of the fact that the first factory to produce superphosphate on commercial scale was established in 1906 at Ranipet in Tamil Nadu, it was only in early '50s that fertilizer manufacture began to assume the dimensions of a major industry. In 1974-75, there were over 50 factories in operation as against 9 in 1950. Production of nitrogenous fertilizers in 1974-75 was 11.85 lakh tonnes as against 90,000 tonnes in 1950-51. Similarly, production of P_2O_5 also increased to 3.27 lakh tonnes as against 90,000 tonnes in 1951.

The total capacity of the public sector factories at Sindri, Nangal Trombay, Rourkela, Alwaye, Neyveli, Namrup, Gorakhpur, Durgapur, Cochin and Madras and the private sector factories at Ennore, Varanasi, Vadodara, Vishakhapatnam, Kota, Goa and Kanpur and the cooperative sector unit of IFFCO together with by-products from coke oven plants on 31 March 1975 was 21.96 lakh tonnes of nitrogen. Another 21 projects with a total capacity of 26.26 lakh tonnes of nitrogen and 6.30 lakh tonnes of P_2O_5 are in various stages of execution. Of these, six projects at Barauni, Khetri, Namrup Expansion, Tuticorin, Mangalore and Vishakhapatnam Expansion, having a total capacity of 7.25 lakh tonnes of nitrogen and 1.72 lakh tonnes of phosphate, are expected to go into production in 1975-76.

To step up the production of fertilizers in the country, a number of public sector undertakings have been set up. These are described below.

The Fertilizer Corporation of India, which was set up in 1961, had six operating units and eleven units under construction as on 31 March 1975. The operating units are at Sindri (Bihar), Nangal (Punjab), Trombay (Maharashtra), Gorakhpur (Uttar Pradesh), Namrup (Assam) and Durgapur (West Bengal). The units under construction are at Barauni (Bihar), Namrup Expansion (Assam), Ramagundam (Andhra Pradesh), Talcher (Orissa), Sindri Modernisation (Bihar), Sindri Rationalisation (Bihar), Trombay Expansion

(Maharashtra), Haldia (West Bengal), Gorakhpur Expansion (Uttar Pradesh), Nangal Expansion (Punjab) and Korba (Madhya Pradesh).

The Fertilizers and Chemicals (Travancore) Ltd., (FACT), is a pioneer in the manufacture of chemical fertilizers. It has two operating units at Alwaye and Cochin. Work on the second stage of the Cochin unit with the assistance of the World Bank is also under way.

The Madras Fertilizer Ltd., a joint sector undertaking, was formed in 1966. The factory, with a capacity of 1.64 lakh tonnes of nitrogen and 85,000 tonnes of phosphate, went into production in 1971.

The Rourkela fertilizer factory, an adjunct of the Rourkela steel plant was commissioned in 1962. During 1973-74, the factory produced 46,000 tonnes in terms of nitrogen.

A unit, set up at Neyveli and integrated with Neyveli Lignite Corporation, started production in 1966. During 1974-75 it produced 17,400 tonnes of nitrogen.

MINING AND MINERALS

MINERAL RESOURCES

India is richly endowed with minerals. The estimated deposits of some of the principal minerals found in the country are given below.

Apatite and Phosphorite

Apatite deposits of commercial importance exist in the Singhbhum district of Bihar and Vishakhapatnam district of Andhra Pradesh. Deposits of phosphorite are located in Madhya Pradesh, Rajasthan and Uttar Pradesh. They have been estimated at about 6.2 crore tonnes.

Bauxite

Important deposits occur in Bihar, Karnataka, Madhya Pradesh, Maharashtra, Orissa and Tamil Nadu. Promising reserves have been located in Andhra Pradesh, Goa, Kerala, and Uttar Pradesh. The reserves of bauxite of all grades have been estimated at 24.9 crore tonnes.

Coal and Lignite

Vast deposits of coal of Gondwana rock formation occur in Andhra Pradesh,Bihar, Madhya Pradesh, Maharashtra, Orissa and West Bengal and of the tertiary formation in Arunachal Pradesh, Assam, Meghalaya and Nagaland. The overall reserves of coal, both coking and non-coking have been estimated at 8,095 crore tonnes. Of these, the reserves of coking coal in the Gondwana coalfields alone are about 2,015 crore tonnes.

Significant reserves of lignite occur in Gujarat, Jammu and Kashmir, Rajasthan and Tamil Nadu. The total estimated reserves are about 210 crore tonnes.

Chromite

Deposits of economic significance occur in Bihar, Karnataka, Maharashtra, Orissa and Tamil Nadu. The total reserves of *insitu* cromite, including lump and fine varieties, are about 1.38 crore tonnes.

Copper Ore

The important copper ore bearing areas are Agnigundala in Andhra Pradesh, Singhbhum in Bihar, Malanjkhand in Madhya Pradesh and Khetri and Dariba in Rajasthan. Besides, significant deposits are also known in Gujarat, Karnataka, and Sikkim. The aggregate reserves have been estimated at about 32.5 crore tonnes.

Diamond

The Panna diamond belt, the only diamond producing area in the country is spread over the districts of Panna, Chhatarpur and Satna (only some parts) in Madhya Pradesh as well as some parts of Banda district of Uttar Pradesh. The diamond field in the south is spread

over the districts of Anantapur, Cuddapah, Kurnool and Krishna in Andhra Pradesh and Bellary in Karnataka.

Gold

There are three important groups of gold mines in the country, *viz*., Ramagiri gold field, Anantapur district, Andhra Pradesh; Kolar gold field, Kolar district, Karnataka; and Hutti mines, Raichur district, Karnataka. Karnataka is the only gold producing state in the country.

Gypsum

Deposits of gypsum are estimated at 121.6 crore tonnes in Rajasthan and Tamil Nadu.

Ilmenite

It occurs mainly in the eastern and western coasts of India, associated with the beach sands. Of the workable deposits of this type, those in Kerala and Tamil Nadu are important. Total inferred reserves of ilmenite in beach sands have been put at over 13.4 crore tonnes.

Iron Ore

Large deposits occur in Bihar, Goa, Karnataka, Madhya Pradesh, Maharashtra, Tamil Nadu and Orissa. The estimated reserves of hematitic ore, containing 55 per cent and more of iron, are about 818.3 crore tonnes. Besides this, about 202.5 crore tonnes of magnesite ore reserves have also been estimated.

Lead-Zinc Ore

The known reserves of lead-zinc ore are located in Gujarat and Rajasthan. Lead ore deposits are known to exist at Agnigundala in Andhra Pradesh and Sargipalle in Orissa. The total reserves have been estimated at about 12 crore tonnes of lead ore and about 10 crore tonnes of zinc ore.

Manganese Ore

Rich deposits of manganese ore are located in Andhra Pradesh, Goa, Karnataka, Madhya Pradesh, Maharashtra, and Orissa. The total measured, indicated and inferred reserves are 10.8 crore tonnes.

Mica

Economic deposits of mica are found in three important belts in Andhra Pradesh, Bihar and Rajasthan.

Nickel Ore

Nickel ore is found in the Cuttack and Mayurbhanj districts of Orissa. The total reserves are placed at 6.5 crore tonnes, of which 4.3 crore tonnes are estimated in Kansa block and 2.2 crore tonnes in Saruabil-Sukarangi area.

Oil

The potential oil-bearing areas are located in Assam, Tripura, Manipur, West Bengal, Ganga Valley, Punjab, Himachal Pradesh, Kutch, eastern and western coastal areas (in Tamil Nadu, Andhra Pradesh and Kerala), Andaman and Nicobar Islands, Lakshadweep and in the offshore areas in the continental shelf.

Refractories

Important deposits of magnesite are found in Karnataka, Salem district, (Tamil Nadu) and Almora district (Uttar Pradesh). The total *insitu* reserves of magnesite are about 52.4 crore tonnes. The estimated reserves of sillimanite are about 3.4 lakh tonnes, of which nearly 2 lakh tonnes are in Sonapahar area of Meghalaya and 1 lakh tonnes in Pipra area of Madhya Pradesh, In the beach sands of Kerala and Tamil Nadu the reserves of sillimanite bearing sands are estimated at 1.3 crore tonnes with about 5 per cent sillimanite. Total estimated reserves of kyanite are 38 lakh tonnes which is found in Bihar, Karnataka, Maharashtra and Orissa. The kyanite deposit around Lapsa Buru in

Singhbhum district of Bihar is the largest deposit of its kind in the world.

Airborne Mineral Surveys and Exploration

To accelerate the search for base metal deposits in the country, the Government of India launched two airborne geophysical surveys, namely, 'Operation Hardrock' and BRGM/CGG project in 1967 and 1971 respectively.,

Follow up explorations carried out after surveys indicate base metal deposits in Andhra Pradesh, Bihar and Rajasthan.

Mineral Production

The value of mineral production (excluding atomic minerals) has increased considerably during the last two decades, from Rs 82.3 crores in 1951 to Rs 780.3 crores in 1974. The share of fuels group was the largest, Rs 575 crores, followed by non-metallic minerals Rs 107.9 crores and metallic minerals Rs 97.4 crores. The data on the value of mineral production in India, excluding atomic minerals, for selected years since 1951 are given in Table 18.9 and quantity and value of mineral production (by minerals) during 1973 and 1974 in Table 18.10.

TABLE 18.9 VALUE OF MINERAL PRODUCTION

(Rs crores)

Year	1951	1961	1969	1970	1971	1972	1973	1974
Value	82.3	181.2	466.5	488.6	506.4	544.0	573.5	780.3[1]

1 Provisional; includes the estimated value for 'minor minerals'.

TABLE 18.10 QUANTITY AND VALUE OF MINERAL PRODUCTION

Mineral (units)	1973		1974[1]	
	Quantity	Value (Rs '000)	Quantity	Value (Rs '000)
1	2	3	4	5
Total value of all minerals[2]		57,35,369		78,02,831
Fuels (total value)		38,07,471		57,49,826
Coal ('000 tonnes)	77,870	28,30,559	83,261	39,67,861
Lignite ,,	3,320	1,15,602	3,019	1,04,987[3]
Natural gas[4] (crores cubic metres)	91.3	31,370	100.9	36,500
Petroleum (crude)('000 tonnes)	7,198	8,29,940[5]	7,491	16,40,478
Metallic minerals (total value)		8,51,235		9,74,139
Bauxite ('000 tonnes)	1,292	27,702	1,092	23,886
Chromite (tonnes)	2,90,537	33,642	398,665	73,626
Copper Ore ('000 tonnes)	1,102	95,276	1,417	96,846
Diaspore (tonnes)	8,451	678	3,076	627
Gold (kilograms)	3,278	98,907	3,145	102,759[3]
Iron Ore ('000 tonnes)	35,562	4,79,449	34,858	5,39,379
Lead concentrates (tonnes)	7,672	10,166	11,143	13,830
Manganese ore ('000 tonnes)	1,489	76,579	1,447	81,003
Silver (kilograms)	4,258	2,398	4,580	4,665
Tungsten ore (kilograms)	25,976	1,198	23,029	1,131
Zinc concentrates (tonnes)	23,913	25,240	29,060	36,387
Non-metallic minerals (total value)		10,76,663		10,78,866
Agate (tonnes)	1,104	141	1,017	147
Apatite ,,	9,980	818	11,501	1,082
Phosphorite (tonnes)	1,36,512	12,384	4,30,739	34,413
Asbestos ,,	12,460	3,333	19,332	4,579
Ball-clay ,,	17,483	279	21,734	370
Barytes ,,	1,18,294	2,547	1,20,126	2,493
Calcite (tonnes)	23,867	430	22,116	404
Chalk ,,	65,652	1,677	52,847	1,513

1	2	3	4	5
Clay (others) ('000 tonnes)	198	597	219	495
Corundum (tonnes)	266	200	327	262
Diamond (carats)	21,427	16,808	20,524	9,654
Diatomacious earth (tonnes)	81	4	50	3
Dolomite ('000 tonnes)	1,449	33,756	1,185	24,315
Emerald (crude) ('000 carats)	3	N.D.	2	N.D.
Emerald (dressed) ,,	—	—	N.A.	N.A.
Felspar (tonnes)	42,802	864	48,467	735
Fire-clay[5] ('000 tonnes)	718	7,040	765	7,311
Fluorite (crude) (tonnes)	35,144	N.A.	32,684	N.A.
Fluorite (graded) ,,	2,951	3,426	3,844	3,378
Garnet (abrasive) ,,	2,741	132	3,679	191
Garnet (gem variety) (kilograms)	810	13	346	7
Graphite (tonnes)	22,728	2,248	23,061	1,781
Gypsum ('000 tonnes)	886	9,998	1,050	14,121
Jaspar (tonnes)	494	22	1,550	66
Kaolin (chinaclay) ('000 tonnes)	374	15,482	387	17,397
Kyanite (tonnes)	58,215	8,742	43,495	8,687
Limestone ('000 tonnes)	25,341	3,22,601	25,049	3,12,936
Lime kankar ,,	340	2,424	285	1,993
Lime-shell ,,	88	1,939	86	1,967
Calcareous sand ,,	1,004	1,771	729	1,319
Magnesite ,,	193	11,863	266	13,400
Mica (crude) (tonnes)	13,830	21,602	13,409	21,883
Mica (waste) ,,	5,107	N.A.	4,823	N.A.
Ochre (tonnes)	53,560	1,079	73,244	1,375
Pyrites ,,	41,507	7,787	35,433	7,079
Pyrophyllite (tonnes)	14,912	435	14,685	348
Quartz ('000 tonnes)	149	1,833	148	1,606
Quartzite ,,	170	3,425	162	2,711
Silica sand ,,	390	6,166	376	4,893
Moulding sand ,,	69	371	65	302
Sand (others) ,,	999	2,700	942	2,741
Fuchsite (quartzite) (tonnes)	3	8	—	—
Salt (rock) ,,	3,599	486	5,272	799
Sapphire (raw) (kilograms)	—	—	—	—
Sillimanite (tonnes)	3,138	1,175	2,913	947
Slate ,,	1,088	200	751	191
Staurolite ,,	3	2	28	14
Stealite ('000 tonnes)	210	7,256	250	8,364
Tourmaline (tonnes)	—	—	—	—
Vermiculite ,,	2,709	173	2,731	152
Wollastonite ,,	476	13	947	29
'Minor minerals'—(value)		5,60,413		5,60,413[3]

[1] Provisional [2] Excluding '*atomic minerals*' [3] Estimated. [4] Relates to gas utilised.
[5] Includes partly the output of fireclay incidentally recovered from the collieries.

N.D.—Not determined
N.A.—Not available

Note: The value of 'minor-minerals' for 1974 is not yet received from the various state governments and, therefore, the same has been estimated.

SOME ORGANISATIONS Several public sector organisations are functioning in the country for the mapping and exploration of minerals, research and exploitation of minerals. Some of the organisations are described below.

Geological Survey of India The Geological Survey of India (GSI), Calcutta, is the principal agency for mapping and exploration of minerals. During 1974-75, it covered an area of about 60,000 sq. km in different parts of the country by geological mapping. In addition about 74,000 metres of drilling was carried out for various minerals.

Mineral Exploration Corporation The Mineral Exploration Corporation (MEC) was formed in 1972 for detailed mineral exploration, and for providing consultancy and ex-

pert services in turn-key projects. It has carried out 1.58 lakh metres of drilling till October 1975 for exploration of various mineral deposits.

Indian Bureau of Mines

The Indian Bureau of Mines was established in 1948. It carries out research on beneficiation of low grade ores and analysis of ores and minerals. Another important function is collection and publication of mineral information and statistics. It also assists the central government in the formulation of its mineral policy and carries out market surveys for mineral commodities in national and international markets. It provides technical consultancy services to the mining industry.

National Mineral Development Corporation Ltd.

The National Mineral Development Corporation Ltd. (NMDC), Hyderabad, was set up in 1958 for the exploitation of minerals other than oil and natural gas and coal. The Corporation, is a subsidiary of SAIL.

Mining and exploitation of specific iron ore deposits is its main sphere of work at present. The Corporation operates diamond mines in Panna district of Madhya Pradesh, iron ore mines of Kiriburu in Bihar and Bailadila 14 in Madhya Pradesh. The Kiriburu mine is being modified and expanded to meet the requirements of the Bokaro steel plant. The mine at Bailadila 14 is earmarked entirely for exports to Japan under a long term contract.

Other important projects presently under development by NMDC are Bailadila (deposit 5), mechanised mine at Donimalai in Karnataka and pelletisation plant to utilise the fines generated at Donimalai.

The figures for production and export of iron ore during 1974 were 3.48 crore tonnes and 2.19 crore tonnes respectively.

Bharat Aluminium Company Ltd.

The Bharat Aluminium Company Ltd., New Delhi, was set up in 1965 to implement two aluminium projects: (i) a 50,000 tonne per annum integrated aluminium project in the Ratnagiri area of Maharashtra, and (ii) a 1,00,000-tonne integrated aluminium project at Korba in Madhya Pradesh. The first stream of the Korba Alumina Plant was commissioned in April 1973. The first phase of the smelter was commissioned in May 1975. Some preliminary work has already been done on the Ratnagiri project.

Hindustan Copper Ltd.

The Hindustan Copper Ltd., Calcutta, is responsible for developing the copper deposits in the country. The projects of the company are the Khetri, Chandmari and Dariba copper projects in Rajasthan, Indian copper complex at Rakha in Bihar, Agnigundala copper-lead project in Andhra Pradesh and Malanjkhand copper project in Madhya Pradesh. The Khetri project is in an advanced stage of construction and some of the units have already been commissioned.

The Indian Copper Corporation, which was taken over by the central government in 1972 and merged with the Hindustan Copper Ltd., produced about 13,000 tonnes of copper metal in 1974-75.

Bharat Gold Mines Ltd.

The Bharat Gold Mines Ltd., Oorgaum, Karnataka, took over the management of the Kolar Gold Mining Undertaking, a departmental undertaking, from 1 April 1972. Production of gold in 1974-75 was 11.5 lakh gm as compared to 18 lakh gm in 1973-74.

ZINC AND LEAD

There are at present two zinc smelters in the country, one operated by the Hindustan Zinc Ltd. in the public sector and the other by Cominco Binani Zinc Ltd. in the private sector. The public sector smelter

is at Debari (Rajasthan) and the private sector smelter at Alwaye (Kerala). The total installed capacity of the two smelters is 38,000 tonnes per annum. An expansion programme of the zinc smelter at Debari is under way to increase its capacity from 18,000 to 45,000 tonnes per annum. A new zinc smelter with 30,000 tonnes capacity is under construction at Vishakhapatnam. It will also have a lead plant of 10,000 tonnes per annum.

There is only one lead smelter at Tundoo (Bihar) in the public sector which is based on the Zawar ore deposits. The smelter, which is being modernised, has a capacity of 3,600 tonnes per annum which is being raised to 6,000 tonnes.

To develop zinc and other allied metals, the Hindustan Zinc Ltd., a central government undertaking, was set up in 1966 at Udaipur, Rajasthan. It is one of the only two zinc producers and the only producer of lead in the country. There are three constituent units of the undertaking, namely, (i) Zawar mines, Rajasthan, (ii) zinc smelter, Debari, Rajasthan and (iii) lead smelter, Tundoo (Bihar).

The Bhotang deposits in Sikkim are being worked by Sikkim Mining Corporation, a company owned by the Government of India and Sikkim Government.

PLANTATION INDUSTRIES

Tea, coffee and rubber plantations together cover only about 0.4 per cent of the cropped area; yet tea is one of the largest foreign exchange earner for the country. These industries, concentrated largely in the north-east and along the south-west coast, employ over 12 lakh workers.

TEA

The production of tea in 1974 was the highest ever recorded. It was 49 crore kg. The 1973 production was 47.19 crore kg. Export earnings from tea in 1974 (April-December) totalled Rs 159.45 crores as compared to Rs 149.4 crores during the corresponding period last year.

Instant Tea

During the past few years there has been an increase in the production and export of instant tea. In the five-year period, 1966-70, production increased ten-fold from 30,354 kg in 1966 to 3.16 lakh kg in 1970. Foreign exchange earnings went up twenty times during the same period, from Rs 5.35 lakhs to Rs 105 lakhs. In terms of quantity, exports went up from 13,608 kg to nearly 3.20 lakh kg. However, during 1973 production declined to 2.14 lakh kg and exports to 2.43 lakh kg valued at Rs 76 lakhs.

The Tea Board, which is the principal agency for the development of the tea industry, is implementing a number of schemes to increase production. These include long-term loans to tea estates, provision of facilities for acquiring machinery on hire-purchase basis and grant of subsidy to the industry for replanting over-aged tea bushes. A Tea Trading Corporation at Calcutta has also been set up which markets Indian tea in consumer packs in certain selected countries.

COFFEE

Production of coffee during 1974-75 was about 99,075 tonnes, comprising 61,671 tonnes of Arabica and 37,404 tonnes of Robusta. Total exports of coffee to Free Currency areas and Rupee Payment countries totalled 55,708 tonnes valued at Rs 58.44 crores.

The Coffee Board, which is responsible for the development of

coffee industry, has undertaken a coffee development plan to improve the yield and quantity of coffee. For this purpose, it advances loans to coffee growers. In 1973-74 Rs one crore were made available to planters.

CARDAMOM

India is the largest exporter of cardamom and accounts for 70 per cent of the world trade. Production in 1974-75 was about 2,700 tonnes as against 2,585 tonnes in 1973-74. Export earnings during 1974 (January to October) were valued at Rs 9.95 crores as against Rs 7.11 crores during the corresponding period of the previous year.

RUBBER

The production of natural rubber during 1974-75 was 1,30,143 tonnes as against 1,25,153 tonnes during 1973-74. Owing to increased indigenous availability of rubber, the Government of India has banned the import of natural rubber from 1973-74.

The Rubber Board assists the industry in its problems and decides on major issues pertaining to it. It introduced a replanting subsidy scheme in 1957, under which Rs 7.28 crores were granted as subsidy up to 31 March 1975.

VILLAGE AND SMALL INDUSTRIES

Although there has been an impressive development of large-scale industries during the two decades of planned development, India still remains predominantly a country of village and small industries. About two crore persons are engaged in these industries, of whom nearly 90 lakhs work in the handloom industries, *i.e.*, more than the total number of persons employed in the organised industries and mining put together.

The small-scale and village industries sector covers a wide range of traditional and modern small-scale industries including handloom, Khadi, powerloom, sericulture, coir, handicrafts, village industries and mechanised small-scale industries.

Development

Long before the Industrial Revolution in the West, India was known as the industrial workshop of the world. Indian textiles, calicoes, muslins and metalware were prized abroad. Under the British rule, however, these flourishing industries suffered rapid decay for they had to make room for the mass-produced British goods.

It was after Independence that action was initiated to solve their age-old problems, such as, lack of credit facilities, outmoded methods and techniques, absence of organised marketing, unsatisfactory arrangements for the supply of raw materials and competition from large-scale units. The union government set up a number of agencies to help the village and small industries. These include the Small Scale Industries Board, the Khadi and Village Industries Commission, the All India Handicrafts Board, the All India Handloom Board, the Coir Board and the Central Silk Board. Apart from this, credit facilities are made available to these industries through a number of institutions. Industrial estates and rural industrial projects have been set up and industrial co-operatives have been organised. State Directorates of Industries and other agencies are responsible for their development in the states.

To determine the requirement of the small-scale sector for framing suitable policy for further development, a nation-wide census of the small sector is under way.

Expenditure under Plans

During the first three Plans, Rs 458.76 crores were spent by the central and state governments for the development of village and small industries. The expenditure during the Annual Plans (1966-69) was Rs 132.55 crores. In the Fourth Plan, the expenditure (estimated) was Rs 250 crores as against the outlay of Rs 293 crores. The Fifth Plan outlay for the development of these industries is Rs 611.12 crores. In addition, about Rs 1,050 crores are expected to be invested from private sources. including banking and financial institutions.

SMALL-SCALE INDUSTRIES

The number of small-scale units registered on a voluntary basis with the industries directorates of different states and union territories went up from 36,000 in 1961 to about 4.09 lakhs on 31 December 1973. They constitute 90 per cent of the total registered factories and account for about 40 per cent of total production in the registered manufacturing sector. According to an assessment, small-scale units covered under the programme of Small Industries Development Organisation were providing employment to 45 lakh workers in 1973. Their fixed investment during the same year was estimated at Rs 815 crores and their output was worth Rs 6,200 crores. (For revised definition of a small-scale unit effective from 1 May 1975 see p. 255). Apart from the quantitative growth, there has also been a significant increase in the variety of products manufactured by these units. Small-scale sector has ventured into many new and sophisticated fields of production which include TV sets, cardiac pacemakers, ECG machines and hearing aids. They also supply parts and components to large-scale industries engaged in the manufacture of machine tools, bicycles, automobiles, electrical appliances and machinery. To encourage the small-scale sector, the central government has reserved 177 items for exclusive production in this sector.

Credit Facilities

Small-scale sector is included in the priority sector for the supply of institutional credit. It receives financial assistance from state governments, State Financial Corporations and banking institutions. Scheduled commercial banks extended credit to 2,12,300 units by 30 June 1974 amounting to Rs 971.50 crores in terms of amounts outstanding.

The Credit Guarantee Scheme, as modified in 1970, has made a substantial contribution to the volume of outstanding and actual advances. The scheme is now being availed of by 207 credit institutions including the State Bank of India and its subsidiaries, nationalised banks, State Financial Corporations and a few co-operative banks had joined this scheme by October 1974. The amount of outstanding guarantees on 31 October 1974 was Rs 1,560.83 crores. The International Development Association also has sanctioned a line of credit for $2.5 crores to the Government of India. Its rupee equivalent would be re-lent to IDBI for refinancing loans disbursed by SFCs.

Allocation of Raw Materials

The small sector gets priority in the allocation of raw materials. The total value of import licences issued to this sector for the import of raw materials, components and spares during 1974-75 (up to November 1974) was Rs 39.28 crores as compared to Rs 83 crores in 1973-74.

Small Industries Development Organisation

Technical advice and assistance to small-scale manufacturers is provided by the Small Industries Development Organisation through its network of 16 service institutes, 16 branch institutes, 58 extension, production and training centres. The organisation also provides common service and tool room facilities in workshops attached to small

industries, service institutes and extension centres. It conducts courses in management and technical disciplines. During 1974-75, it provided technical assistance to 1,02,684 entrepreneurs and visited 70,965 factories for spot guidance.

Two new centres namely the Central Institute of Tool Design, Hyderabad and The Institute for Design of Electrical Measuring Instruments, Bombay have started providing technical guidance and training for entrepreneurs.

National Small Industries Corporation

The National Small Industries Corporation, which was set up in 1955, operates the scheme of procuring machinery for small-scale manufacturers on a hire-purchase basis on concessional terms. The value of machines delivered under this scheme during period April-October 1974 was Rs 5.69 crores as against Rs 3.25 crores during the corresponding period of the previous year. It also assists the small-scale sector in processing orders from government departments and agencies. The value of stores purchased by the Directorate General of Supply and Disposals from April to November 1974 was about Rs 37 crores. The Prototype Development and Training Centres set up with American, West German and Japanese assistance at Rajkot, Okhla (Delhi) and Howrah impart training to persons engaged in small-scale industries.

Industrial Estates

Several industrial estates have been set up all over the country to accommodate small industrial units in more congenial atmosphere where various common facilities are provided for their smooth working. On 30 September 1973, 9,497 small-scale units were working. They produced goods worth Rs 285 crores and provided employment to about 1,38,000 persons.

Rural Industries Projects

A centrally-sponsored scheme for rural industries projects was taken up in 1962-63. Its main object is to evolve techniques for establishing viable industrial units in rather inhospitable rural environments. Another aim is to reduce the disparities in the levels of development among different regions, and provide gainful employment opportunities. To start with, 45 areas were selected in the states and some union territories each covering three to five development blocks with a population of 3 to 5 lakhs for intensive development of small industries in rural areas. Nine more areas were added later. More than 40,700 industrial units had been set up in 49 projects by 31 March 1974 with an investment of Rs 44 crores. The value of production during 1973-74 was about Rs 67 crores. These provided employment to 1,77,000 persons.

The programme had been extended to 57 new districts at the beginning of the Fifth Plan. The strategy of the programmes for the development of small industries in the Fifth Plan is designed to facilitate the creation of opportunities for fuller and additional productive employment. The programmes are reoriented to increase the production of some essential commodities for mass consumption.

HANDLOOMS AND POWER-LOOMS

The handloom industry ranks in importance next only to agriculture in employment potential. There are about 36 lakh handlooms, of which 12.7 lakhs are in the co-operative sector. About 90 lakh persons depend on this industry for their livelihood. Powerloom industry is of recent growth. There were three lakh power operated looms in the country as on 31 December 1974.

The targets of production for the decentralised sector (comprising handlooms and powerlooms) was stepped up from 157 crore metres in 1950-51 to 425 crore metres and the estimated production in 1974 was 396.8 crore metres. A target of 480 crore metres—300 crore metres for handlooms and 180 crore metres for powerlooms—has been fixed for the Fifth Plan period. This amounts to about 50 per cent of the total requirement of cloth in the country.

The handloom industry has achieved an important position in exports, which increased from Rs 11.60 crores in 1967-68 to about Rs 99.56 crores in 1974-75.

Development of handloom sector has been given a prominent place in the 20-Point Economic Programme. A comprehensive programme for its all-round development is being prepared and a Development Commissioner has been appointed.

HANDICRAFTS

Handicrafts include a large number of crafts which are backed by centuries of experience and skill. The present production of handicrafts (including gem and jewellery) is Rs 400 crores and is expected to reach Rs 600 crores by the end of the Fifth Five Year Plan. As a result of the various development and export promotion efforts, exports picked up from Rs 22.18 crores in 1967-68 to about Rs 82.89 crores (provisional) in 1974-75. A target of Rs 140 crores has been fixed for the Fifth Five Year Plan.

In addition to its contribution to exports, the handicrafts sector employs 14 lakh workers. The number is expected to reach 18 lakhs by the end of the Fifth Plan. To promote the development of handicrafts, an allocation of Rs 8 crores has been made in the central sector for the Fifth Plan, of which Rs 1.6 crores have been provided for 1975-76.

To increase the production and exports of handicrafts, an All India Handicrafts Board was set up at New Delhi in 1952. It has five regional offices in Bombay, Calcutta, Lucknow, Madras and New Delhi. A Central Handicrafts Development Centre at Bangalore and a Central Crafts Museum at Delhi have also been set up by the Board. For marketing of handicrafts, about 250 emporia have been set up all over India by the central and state governments and administrations of union territories.

COIR

The coir industry is essentially a cottage industry. It employs about 5 lakh people directly. Of the estimated annual production of 1.34 lakh tonnes of coir yarn, more than 90 per cent is produced in Kerala. Production of coir fibre is now estimated at 1.55 lakh tonnes, that of coir products at 27,000 tonnes and of coir rope 20,000 tonnes. The value of exports of coir yarn and products has steadily increased from Rs 8.7 crores in 1960-61 to Rs 15.5 crores in 1973-74 and Rs 17.5 crores in 1974-75.

The Coir Board, set up by the central government as a statutory organisation promotes the development of coir industry.

SILK

About 30 lakh kg of all varieties of natural silk valued at about Rs 50 crores at current market price are produced annually in the country. Nearly two-thirds of this is produced in Karnataka, followed in order of production by West Bengal, Assam, Bihar, Madhya Pradesh and Jammu and Kashmir. There are about 1.25 lakh handlooms and about 3,800 powerlooms engaged in the production of natural silk weaving. The number of persons to whom sericulture provides part

or full-time employment is over 35 lakhs. Annual export earnings amount to Rs 15 crores.

The Central Silk Board, established in 1949, is responsible for the development of silk and sericulture industry and co-ordinates research.

KHADI AND VILLAGE INDUSTRIES

Khadi and village industries generally process local raw materials and mainly cater to the requirements of the local population. Some of the important industries under this category are Khadi (cotton, woollen, silk), the processing of cereals and pulses, village oil, cane-gur and khandsari, palm-gur, non-edible oils and soap, bee-keeping, handmade paper, village pottery, gobar gas, carpentry and blacksmithy. The Khadi and Village Industries Commission is responsible for the development of these industries. It provides financial and other assistance to registered institutions and co-operative societies, State Khadi and Village Industries Boards and 23 other village industries which come within its purview. The Commission disbursed Rs 11.53 crores to various agencies implementing its programmes in 1973-74.

The development programme of the Khadi and village industries in 1973-74 showed improvement over last year, both in production and employment. Production was worth Rs 155.12. crores in 1973-74. Of this, Khadi accounted for Rs 37.72 crores, village oil Rs 33.04 crores, cane-gur and khandsari Rs 37.86 crores, processing of cereals and pulses Rs 13.64 crores, village leather Rs 8.26 crores and palm gur Rs 7.79 crores, handmade paper Rs 0.95 crore and gobar gas Rs 0.57 crore.

During 1973-74 these industries provided employment to 18.11 lakh persons. Of the total employment, Khadi accounted for 8.84 lakhs and palm-gur 3.04 lakhs.

19 COMMERCE

EXTERNAL TRADE

Until 1947 India had a pattern of trade which was traditionally that of a colonial and agricultural country. The bulk of her foreign trade was confined to Britain and other Commonwealth countries. While exports were based on a few primary commodities, imports were restricted and consisted mainly of manufactured articles. Though, on the surface, there was a favourable balance of trade, it concealed a low level of industrial production and economic development.

With the impressive industrial development since Independence, India's foreign trade has undergone a complete metamorphosis and is no longer confined to a few countries. She, now, has trading links with practically all the countries of the world. The items on the export list today number about three thousand as against fifty at the time of Independence.

Similarly, there has been a great increase in imports on account of the development needs of the economy. The composition of imports has, naturally, undergone a great change. The bulk of the imports now consists of sophisticated machines, scarce raw materials, lubricants and oils and fertilizers which are essential for the country's industrial and agricultural development. The country has had an adverse balance of trade mainly on account of heavy imports necessary for its development.

VALUE OF FOREIGN TRADE

The total value of foreign trade (imports plus exports including re-exports) during 1974-75 was Rs 7,601 crores as compared to Rs 5,448 crores in 1973-74. The value of imports and exports, the total value of foreign trade and the balance of trade for selected years since 1950-51 are given in Table 19.1.

TABLE 19.1
FOREIGN TRADE OF INDIA

(*Rs crores*)

Year	Imports	Exports (including re-exports)	Total value of foreign trade	Balance of trade
1950-51 ..	650.21	600.64	1,250.85	—49.57
1960-61 ..	1,139.69	660.22	1,799.91	—479.47
1965-66 ..	1,408.53	805.64	2,214.17	—602.89
1969-70 ..	1,582.10	1,413.28	2,995.38	—168.82
1970-71 ..	1,634.20	1,535.16	3,169.36	—99.04
1971-72 ..	1,824.54	1,608.22	3,432.76	—216.32
1972-73 ..	1,867.44	1,970.83	3,838.27	+103.39
1973-74 ..	2,925.25	2,523.40	5,448.65	—401.85
1974-75 ..	4,348.66	3,253.04	7,601.70	1,095.62

Note I: The export figures from November 1970 onwards are based on the original copy of the shipping bill after an adjustment made for short and shut out shipment returns received during the period. As such, these are not comparable to the export figures for period prior to October 1970 which were based on the finally passed shipping bills. The method of compilation of export statistics was changed again in April 1973. As a result, the export figures from April 1973 onwards are based on finally passed shipping bills.

Note II: (1) The data cover trade by sea, air and land. Figures of trade with Sikkim and Bhutan are not included. Land-borne trade with Nepal and export of items through parcel post as well as the trade of Goa, Daman and Diu was included from 1962-63 owards, and the trade of Andaman and Nicobar Islands from April 1963. (2) Transhipment trade and ships stores are excluded. From

1957, direct transit trade (trade of adjacent countries passing in transit through Indian ports but through bills of landing) is excluded, but indirect transit trade (goods previously imported but kept in ware-houses and afterwards re-exported) is included first under imports and thereafter under re-exports. (3) Besides merchandise trade, trade in treasure—gold and silver—has been included. From 1957, silver is covered under merchandise. (4) The import figures exclude certain consignments of foodgrains and government stores awaiting adjustment. (5) While exports are valued on f.o.b./f.o.r. basis inclusive of export duty and other charges payable at the time of export, imports are valued on c.i.f. basis and are exclusive of import duty.

The adverse balance of trade, which had been widening since 1956 owing to an increase in imports needed to meet the requirements of development and a relatively slower growth of exports, showed a generally upward tendency till 1966-67. This trend was reversed in 1967-68, and in the subsequent years up to 1970-71 there was a sharp decline in the country's trade deficit. But again there was a substantial increase in imports during 1971-72 resulting in a fairly heavy deficit in the balance of trade that year. In 1972-73, however, as a result of an appreciable increase in exports, the balance of trade turned into a favourable one for the first time during the last 25 years. During 1973-74, exports increased by 27 per cent but imports also went up by 56 per cent resulting in an adverse balance of trade amounting to Rs 402 crores. Trade deficit during 1974-75 further widened to Rs 1,096 crores when exports increased by 28.9 per cent and imports by 48.6 per cent.

BALANCE OF PAYMENTS

Tables 19.2 and 19.3 show India's balance of payments position on current and capital accounts respectively in 1970-71, 1971-72 and 1972-73.

PATTERN OF TRADE

Exports, which had been more or less stagnant during the decade 1951-60, averaging a little over Rs 600 crores per annum, started increasing between 1961 and 1966. On 31 March 1966, exports stood at about Rs 806 crores. There has been an impressive increase in exports since then. In 1974-75, exports totalled Rs 3,253 crores.

The exports have not only gone up, they have also witnessed an increasing diversification in recent years. The increase has been well spread over a number of commodities. Among the important items, exports of cotton manufactures went up from Rs 48.2 crores in 1961-62 to Rs 235.3 crores in 1973-74, iron ore and concentrates from Rs 17.4 crores to Rs 132.8 crores, unmanufactured tobacco from Rs 14.1 crores to Rs 61.1 crores and iron and steel from Rs 9.7 crores to Rs 58 crores. Exports of jute manufactures were at the level of Rs 225.5 crores in 1973-74 after witnessing a declining trend from 1967-68 to 1971-72. However, exports of tea which reached an all time high of Rs 180 crores in 1967-68 have been declining since then. There was only a partial recovery in 1970-71 and in 1971-72 when tea exports amounted to Rs 148.2 crores and Rs 156.3 crores respectively. This trend also suffered a setback in 1972-73 and 1973-74 when tea exports amounted to Rs 147.29 crores and Rs 144.85 crores respectively. Table 19.4 gives the principal items of exports for 1950-51 and 1965-66 and 1969-70 onwards.

EXPORTS

During April-December 1974, there was an appreciable increase in the exports of sugar (Rs 153.79 crores), rice (Rs 14.39 crores), tea (Rs 43.97 crores), tobacco manufactured (Rs 13.94 crores), cashew kernels (Rs 30.25 crores), apparel and handloom piece goods (Rs.

TABLE 19.2

BALANCE OF PAYMENTS: CURRENT ACCOUNT

(*Rs crores*)

Item	1970-71 (Preliminary)			1971-72 (Preliminary)			1972-73 (Preliminary)		
	Credits	Debits	Net	Credits	Debits	Net	Credits	Debits	Net
1. Merchandise[1]									
(i) Private	1,401.7	646.2	+755.5	1,551.2	773.8	+777.4	1,881.3	779.1	+1,102.2
(ii) Government	1.0	1,074.2	—1,073.2	4.2	1,219.8	—1,215.6	14.2	1,367.4	—1,353.2
2. Non-monetary gold movement	13.1	—	+13.1	—	—	—	—	—	—
3. Foreign travel[2]	27.9	17.8	+10.1	31.5	19.5	+12.0	37.9	19.3	+18.6
4. Transportation	106.5	78.4	+28.1	111.7	68.3	+43.4	121.7	71.0	+50.7
5. Insurance	11.7	12.2	—0.5	13.5	18.5	—5.0	16.7	12.2	+4.5
6. Investment income	48.5	274.2	—225.7	35.0	262.4	—227.4	29.6	285.7	—256.1
7. Government not included elsewhere[3]	30.1	23.0	+7.1	29.0	24.0	+5.0	30.9	22.7	+8.2
8. Miscellaneous	55.4	77.6	—22.2	52.4	80.4	—28.0	60.3	84.0	—23.7
9. Transfer payments									
(i) Official	59.5	6.4	+53.1	92.8	18.3	+74.5	63.7	20.5	+43.2
(ii) Private[4]	136.4	13.2	+123.2	174.5	12.3	+162.2	165.3	11.3	+154.0
10. Total current transactions	1,891.8	2,223.2	—331.4	2,095.8	2,497.3	—401.5	2,421.6	2,673.2	—251.6
11. Errors and omissions	—	—	—78.7	—	—	—65.2	—	—	—31.6

Note: The figures are based on exchange control data and are not comparable with those published by the Directorate-General of Commercial Intelligence and Statistics. For factors causing discrepancies, see 'India 1966', p. 326. The rupee equivalent of all foreign currency transactions has been arrived at by using the current exchange rates. All transactions relating to Goa, Daman and Diu are included.

[1]Exports f.o.b.; imports c.i.f. [2]Data for receipts for the quarter January-March, 1968 and thereafter up to January-March, 1969 are incomplete. [3]Credits include US Embassy expenditure in India met out of P.L. 480 funds. [4]Credits include contra entries for imports under P.L. 480 title II programme.

Beginning with the quarter October-December, 1965, the basis for the recording of the exports data were changed from shipments approved during a month to actual shipments in respect of which documents were negotiated during a month.

TABLE 19.3

BALANCE OF PAYMENTS: CAPITAL ACCOUNT

(*Rs crores*)

Item	1970-71 (Preliminary)			1971-72 (Preliminary)			1972-73 (Preliminary)		
	Credits	Debits	Net	Credits	Debits	Net	Credits	Debits	Net
1. Private[1]	40.0	70.4	—30.4	53.4	57.7	—4.3	57.3	64.8	—7.5
(i) Long-term	38.8	68.2	—29.4	52.6	55.4	—2.8	56.8	63.7	—6.9
(ii) Short-term	1.2	2.2	—1.0	0.8	2.3	—1.5	0.5	1.1	—0.6
2. Banking[2]	43.7	51.4	—7.7	54.5	45.1	+9.4	66.2	83.7	—17.5
3. Official[3]	1,367.6	919.4	+448.2	1,131.7	670.1	+461.6	928.6	620.4	+308.2
(i) Loans[4]	658.9	157.2	+501.7	626.7	10.8	+615.9	586.9	1.3	+585.6
(ii) Amortisation[5]	2.3	190.5	—188.2	3.1	213.2	—210.1	—	245.4	—245.4
(iii) Miscellaneous[6]	386.8	340.8	+46.0	307.1	152.8	+154.3	194.7	260.1	—65.4
(iv) Reserves[7]	319.6	230.9	+88.7	194.8	293.3	—98.5	147.0	113.6	+33.4
Total capital and monetary gold	1,451.3	1,041.2	+410.1	1,239.6	772.9	+466.7	1,052.1	768.9	+283.2

Note: The rupee equivalent of all foreign currency transactions has been arrived at by using the current exchange rates.

[1]Includes drawings and repayments on account of IBRD loans and other foreign government loans to private sector in India. [2]Excluding RBI. [3]Including. RBI. [4]Credits represent utilisation of various foreign loans and credits obtained by the official sector from the IBRD, IDA and foreign governments, as well as rupee loans out of PL 480 and PL 665 counterpart funds, and drawings from the IMF. Debit entries relate to the repurchase of rupees from the IMF. [5]Entries relate mainly to repayments of loans from the IBRD and from foreign governments, capital withdrawals and disbursements relating to the Pension Annuity arrangements under the Indo-UK Financial Agreement of July 1948, capital repayments by the UK of excess pension fund under the Pension Resettlement Arrangements of March 1965, repayment of partition debt by Burma and repayments of the loan extended to Burma in 1957. [6]Covers capital receipts and payments on official account other than loans and amortisation transactions. [7]Represents changes in the foreign exchange assets of the RBI and the Government of India and the gold holdings of the former and SDR holdings of the latter.

TABLE 19.4

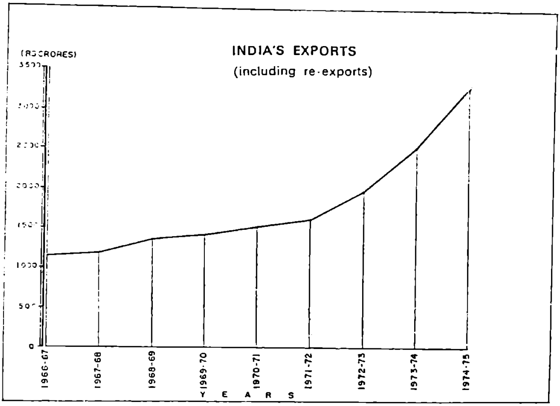
EXPORTS OF PRINCIPAL COMMODITIES (BY SEA, AIR AND LAND)

(*Rs lakhs*)

Commodity	1950-51	1965-66	1969-70	1970-71	1971-72	1972-73	1973-74
Jute manufactures (excluding twist and yarn)	11,277	18,162	21,496	18,917	26,329	24,720	22,554
Tea	7,989	11,484	12,450	14,825	15,631	14,729	14,485
Cotton manufactures (excluding twist and yarn)	11,944	6,329	8,663	9,747	10,005	12,671	23,529
Textile fabrics (other than cotton and jute)	461	742	1,092	1,213	1,359	1,558	3,620
Textile articles (other than cotton and jute mfrs, woollen carpets, carpeting floor rugs and mattings)	837	458	707	720	1,105	1,027	1,011
Textile yarn and thread	2,564	1,507	4,092	3,448	2,812	3,710	3,025
Ores of non-ferrous base metals and concentrates	—	1,154	1,471	1,749	1,409	1,474	1,958
Leather	2,577	2,821	8,053	7,159	9,014	17,045	16,587
Raw cotton (excluding linters and waste)	494	1,039	1,469	1,395	1,664	2,158	3,240
Fresh fruits and nuts (excluding oilnuts)	1,095	2,924	5,999	5,441	6,347	7,271	7,892
Crude vegetables materials, inedible	1,361	1,678	2,576	3,402	3,762	3,956	5,760
Raw wool	787	643	413	411	342	597	704
Sugar (including molasses)	17	1,119	884	2,930	3,103	1,377	4,259
Iron ore and concentrates	22	4,237	9,462	11,728	10,470	10,979	13,283
Tobacco, unmanufactured	1,411	1,957	3,271	3,140	4,225	6,107	6,841
Vegetable oils (non-essential)	2,526	409	495	703	757	2,548	3,084
Crude minerals (excluding coal, petroleum, fertilizer materials and precious stones)	negl.	1,461	2,188	2,230	2,105	2,349	2,140
Woollen carpets, carpeting floor rugs and mattings	556	448	1,099	996	1,271	2,020	2,406
Iron and steel	287	1,238	8,679	9,062	4,087	4,176	5,800
Coffee	135	1,294	1,962	2,511	2,207	3,293	4,601
Hides and skins, undressed	956	945	831	377	63	83	138
Petroleum products	3	646	742	856	884	1,318	1,225
Coal, coke and briquettes	336	286	205	401	107	316	307
TOTAL (including other items)	60,064	80,564	1,41,328	1,53,516	1,60,822	1,97,083	2,48,322

Note: The export figures from November 1970 onwards are based on the original copy of the shipping bill after an adjustment made for short and shut out shipment returns received during the period. As such, these are not comparable to the export figures for a period prior to October 1970 which were based on the finally passed shipping bills.

29.63 crores), jute manufactures (Rs 71.72 crores), engineering goods (Rs 113.11 crores), coffee (Rs 15.69 crores), finished leather (Rs 13.05 crores), handicrafts (Rs 21.63 crores) and chemicals and allied products (Rs 36.96 crores). There was a moderate increase in the export of spices, iron ore, manganese ore, groundnuts, mica, cotton yarn, footwear, cement, lac, mineral fuel and lubricants and plastic manufactures. The items to register a sharp decline were oil cakes (Rs 54.69 crores), fish (Rs 12.26 crores), cotton piecegoods mill-made (Rs 8.96 crores), E.I. tanned hides and skins (Rs 15.79 crores), chrome tanned (Rs 16.23 crores) and iron and steel (Rs 11.72 crores).



A brief review covering some of the important items is given below.

Jute Manufactures

During the past few years, exports of Indian jute goods have been losing ground in the world markets primarily due to keen competition from synthetic substitutes and supplies from Bangladesh. During April-December 1974, exports of jute goods increased to Rs 255.6 crores from Rs 183.8 crores during the corresponding period of the preceding year.

A Jute Corporation was set up in 1971 to stabilise prices of raw jute at remunerative levels and to market jute goods aborad.

Tea

Exports of tea during April-December 1974 increased to 16.5 crore kg valued at Rs 159.5 crores from 14.9 crore kg valued at Rs 115.5 crores during the corresponding period of the previous year.

A Tea Trading Corporation was set up in 1971 to promote exports of packaged tea.

Cotton Textiles

Exports of cotton textiles are subject to quantitative restrictions imposed by a number of industrial countries. This has restricted

the scope for increase in exports. However, India has been able to secure a larger quota from countries of the European Economic Community and their offtake is expected to improve.

During April-December 1974, exports of cotton piecegoods (mill-made) at Rs 103.6 crores showed a decline of Rs 8.2 crores compared with the corresponding period of the preceding year.

Exports of cotton yarn at Rs 15.4 crores were higher by Rs 8.2 crores compared to the corresponding period of the preceding year. Exports of cotton apparel at Rs 66.1 crores were higher by Rs 28.5 crores compared to the corresponding period of the preceding year. Similarly, exports of handloom piecegoods improved by Rs 1.2 crores to Rs 22.8 crores.

Unmanufactured Tobacco

The increasing trend in the exports of unmanufactured tobacco continued during April-December 1974. Exports improved by Rs 13.9 crores to Rs 64.9 crores.

A Tobacco Marketing Board is being set up to deal with the problems of production and marketing of flue-cured tobacco.

Fruits, Vegetables and Pulses

Exports of fruits, vegetables and pulses during April-December 1974 amounting to Rs 104.4 crores were higher by Rs 31.8 crores compared with the preceding corresponding period. The main item under this group is cashew kernels, export of which amounted to Rs 93.3 crores as compared to Rs 63.0 crores in the corresponding preceding period.

Engineering Goods

Exports of engineering goods increased to Rs 233.6 crores during April-December 1974 as against Rs 120.5 crores during the corresponding preceding period. The range of engineering goods exported not only showed a fair measure of diversification and specialisation, but some of the products also found their way to developed countries.

Iron Ore

Exports of iron ore increased in terms of value but declined in terms of quantity. They amounted to 141 lakh tonnes valued at Rs 93.0 crores during April-December 1974 against 159 lakh tonnes valued at Rs 89.0 crores during the corresponding preceding period.

Iron and Steel

Exports of iron and steel during April-December 1974 were valued at Rs 8.8 crores recording a decline of Rs 11.7 crores over the same period of the preceding year.

Leather and Leather Manufactures

Exports of leather and leather manufactures (excluding footwear) at Rs 110.9 crores during April-December 1974 recorded a decline of Rs 12 crores over the corresponding preceding period. However, finished leather registered an increase by Rs 13.1 crores at the level of Rs 23.3 crores during the same period.

Fish

Exports of fish at Rs 48.0 crores during April-December 1974 recorded a decline of Rs 12.3 crores over the corresponding period of the previous year. The unit value realised from the export of fish also registered a decline. It was Rs 17,959 per tonne during April-December 1974 against Rs 18,245 per tonne during the corresponding period of last year.

Coffee

Exports of coffee during April-December 1974 at Rs 43.7 registered an increase of Rs 5.7 crores over the corresponding period of the previous

year. The increase was on account of a rise in the unit value realised.

India's exports of coffee till recently were regulated in terms of the International Coffee Agreement to which she is a signatory. This restricted the scope for increasing exports to the traditional markets. From 1 October 1973, the operation of the quota and price clauses of the International Coffee Agreement have been suspended. The Coffee Board has undertaken a programme to popularise the use of coffee in non-traditional markets.

Oilcakes

Exports of oilcakes at Rs 65.7 crores nearly halved from the level of Rs 120.4 crores during April-December 1974. The unit value realised during this period also declined from Rs 1,409 to Rs 1,158 per tonne.

Petroleum Products

Exports of petroleum products registered an increase from Rs 5.6 crores to Rs 9.7 crores during April-December 1974.

Handicrafts

Exports of pearls, precious and semi-precious stones (unworked and worked) improved slightly from Rs 65.4 crores in April-December 1973 to Rs 66.4 crores during April-December 1974. This increase was made possible because of favourable market conditions abroad, particularly in the USA. An appreciable increase of Rs 6.8 crores was also recorded in the exports of handmade carpets and druggets which amounted to Rs 25.6 crores. Moderate increases were recorded in the exports of metal artware and woodware.

IMPORTS

Table 19.5 gives principal imports with value, for the years 1950-51, 1965-66 and 1969-70 onwards.

The rising trend in imports was reversed in 1967-68 and imports thereafter continued to decline until 1969-70. The decline was mainly in the imports of foodgrains, because of better domestic crops. In some other imports, decline was due to indigenous substitution, shortage of foreign exchange and slackness in home demand. There was, however, an increase in imports during 1970-71, 1971-72 and 1972-73 on account of shortfalls in the domestic production of iron and steel, raw cotton and fertilizers.

Imports in 1973-1974

Imports during April-December 1973 increased to Rs 1,785.0 crores from Rs 1,236.7 crores during the preceding corresponding period showing a rise of Rs 548.3 crores or 44.3 per cent. The increase in imports was due mainly to higher imports of cereals and cereal preparations, transport equipment, non-ferrous metals, fertilizers, petroleum crude and petroleum products, machinery and chemical elements and compounds.

DIRECTION OF TRADE

Imports

The principal countries from which India imported and the value of imports from each of these countries for the years 1950-51, 1965-66 and 1969-70 onwards are shown in Table 19.6.

The table shows that over the years USA has been the largest supplier, mainly because of imports of foodgrains and other items under aid and grants. But owing to a decline in imports of foodgrains by India, the USA was relegated to the second position in 1972-73. In 1973-74, it regained its position with Iran occupying the second place. There was also an appreciable increase in imports from USSR, Japan, Belgium, Germany (West) and Italy during the year.

Exports

UK and USA continued to be India's principal buyers until 1968-69. Since 1969-70, USSR and Japan are also among the principal

TABLE 19.5

IMPORTS OF PRINCIPAL COMMODITIES (BY SEA, AIR AND LAND)

(*Rs lakhs*)

Commodity	1950-51	1965-66	1969-70	1970-71	1971-72	1972-73	1973-74
Iron and steel	1,431	9,800	8,151	14,704	23,760	22,581	24,256
Machinery other than electric	6,676	32,244	28,035	25,781	27,086	29,793	41,646
Petroleum products	5,427	3,335	4,124	2,999	4,667	5,921	14,319
Transport equipment	3,493	7,055	5,122	6,654	9,459	10,012	8,839
Electric machinery and appliances	2,191	8,780	6,432	7,035	10,514	13,402	12,414
Raw cotton	10,007	4,621	8,278	9,883	11,339	9,088	5,205
Wheat, unmilled	9,921	26,473	18,433	17,337	10,260	4,816	34,610
Petroleum, crude and partly refined	NA	3,487	9,633	10,590	14,747	14,483	41,709
Chemical elements and compounds	917	3,586	6,742	6,798	7,185	9,138	10,532
Manufactures of metals	1,394	1,817	734	928	1,213	1,879	2,155
Textile yarn and thread	1,503	592	243	441	575	330	348
Copper	849	3,337	4,740	6,020	5,121	5,190	7,045
Zinc	656	1,284	825	2,197	1,769	2,286	2,772
Rice	5,349	4,190	5,825	2,982	1,807	1,071	645
Medicinal and pharmaceutical products	997	873	1,830	2,427	2,656	2,322	2,639
Fresh fruits and nuts	951	1,886	3,422	3,582	3,162	4,068	3,640
Raw wool and hair	562	512	1,724	1,607	1,423	1,188	2,095
Paper and paper-board	1,014	1,323	2,358	2,484	3,471	3,104	2,864
Oilseeds, nuts and kernels	229	881	344	636	1,053	1,232	737
Coal-tar, dyestuffs and natural indigo	1,198	375	278	416	370	324	377
Aluminium	238	629	151	335	979	287	279
Milk and cream, dried or condensed	356	664	760	704	1,899	1,794	1,499
Raw jute and waste	7	916	108	14	negl.	113	1,222
Vegetable oils	334	711	1,723	2,308	2,817	1,550	5,694
TOTAL (including other items)	65,021	1,40,853	1,58,210	1,63,420	1,82,454	1,86,744	2,92,091

NA—Not available.

TABLE 19.6

IMPORTS FROM PRINCIPAL COUNTRIES (BY SEA, AIR AND LAND)

(*Rs lakhs*)

Country	1950-51	1965-66	1969-70	1970-71	1971-72	1972-73	1973-74
USA	11,916	53,483	46,722	45,295	41,869	23,487	49,341
UK	13,531	15,009	10,259	12,676	22,081	23,725	24,481
Germany (West)	—	13,714	8,444	10,747	12,704	17,258	19,573
Iran	3,700	3,408	8,343	9,164	12,636	12,198	26,758
Japan	1,011	7,933	6,741	8,343	16,160	17,853	25,557
Italy	1,626	1,986	3,985	2,886	2,447	3,594	4,908
France	1,107	1,805	2,373	2,134	3,707	3,935	6,976
USSR	23	8,317	17,133	10,613	8,732	11,437	24,975
Belgium	922	1,151	814	1,151	3,433	5,104	6,552
Switzerland	761	1,451	1,108	1,157	783	1,165	1,680
Australia	3,345	2,418	3,313	3,658	2,940	3,385	4,366
Malaysia[1]	81	1,277	827	575	385	842	3,209
Saudi Arabia	87	866	1,749	2,417	3,834	4,484	13,135
Canada	2,190	3,152	7,487	11,723	11,333	10,761	11,542
Czechoslovakia	277	2,115	2,302	2,020	1,017	1,591	2,653
Bangladesh	—	—	—	—	negl.	346	1,689
Burma	1,880	972	2,015	964	587	205	7
Netherlands	726	1,977	1,581	1,909	3,085	3,669	5,432
Singapore	1,608	—	154	117	299	283	971
Sweden	529	1,063	1,048	980	1,271	1,893	2,370
Egypt	3,287	1,996	2,169	3,984	3,322	2,887	2,590
Kenya	1,852	456	453	969	1,770	632	1,742
Sudan	749	574	2,722	2,094	2,532	4,580	2,193
TOTAL (including other countries)	65,021	1,40,853	1,58,210	1,63,420	1,82,454	1,86,744	2,92,091

[1] Figures for 1965-66 relate to Malaysia including Singapore.

buyers. During 1968-69, the share of UK and USA in India's exports was 14.8 and 17.2 per cent respectively. But in 1973-74 they accounted for 10.4 and 13.8 per cent of exports respectively. In 1973-74 Japan emerged as the largest buyer with a share of 14.3 per cent in the total exports followed by USA (13.8 per cent) and USSR (11.6 per cent). Other important buyers were France, Germany (West), Italy, Netherlands, Bangladesh and Singapore.

The principal countries to which India exported and the value of exports to each of these countries for the years 1950-51, 1965-66 and 1969-70 onwards are given in Table 19.7. A study of these figures reveals an increasing diversification in the direction of export trade. India's exports to the East European countries rose from Rs 63 crores in 1961-62 to Rs 646 crores in 1973-74.

TRADE POLICY The trade policy is governed by the terms of the Export Policy Resolution presented to Parliament in July 1970. It has laid down guidelines for the realisation of the country's objective for expanding export earnings at a high rate. In keeping with this policy, the Government of India promotes necessary investments to increase production capacity for exports so that the surpluses required for the long-term growth of exports are guaranteed in increasing quantities.

Provision has also been made, under the Industrial Licensing Policy, for expansion of industrial output especially for exports. To deal with problems connected with production, generation of surpluses and the development of markets abroad for different manufactures and commodities, a separate Department of Export Production has been created in the Ministry of Commerce. A Secretariat for Industrial Approvals has been set up in the Department of Industrial Development for expeditious disposal of applications for giving preferential allocations of foreign exchange for import of capital goods by export-oriented units as well as for assisting units which put forward attractive phased export programmes.

Public sector trading agencies are being geared up for canalising increasing sectors of import and export trade to take advantage of bulk purchases and to assure industry of the raw materials required for sustaining production, at the same time bringing down the level of inventories required in the country, to push the exports of new and difficult items to new markets and to organise exports on more rational basis. Sales organisations and techniques are also being re-oriented. In the public sector, the need for growing specialisation has been recognised by setting up special corporations to handle the specialised trade in items, such as cotton textiles, marine products, tobacco, cashew, complete projects and equipment.

The import policy of the government is so designed as to further develop foreign trade of the country on a rationlal basis. It is calculated to bring in an increasing amount of the import trade under the ambit of state trading agencies, give further fillip to export production, streamline procedures, encourage the setting up of small-scale industries and assist professional and technical people in their vocations by giving them necessary import facilities for their professional and technical work.

To offset the repercussions on India's balance of payments position arising from the recent oil crisis and the steep escalation of world prices of India's crucial import items, such as, steel, non-ferrous metals, fertilizers and newsprint, efforts to maximise export earnings from all

TABLE 19.7

EXPORTS TO PRINCIPAL COUNTRIES

(*Rs lakhs*)

Country	1950-51	1965-66	1969-70	1970-71	1971-72	1972-73	1973-74
UK	13,982	14,478	16,507	17,044	16,870	17,253	25,839
USA	11,588	14,698	23,796	20,734	26,308	27,574	34,278
USSR	138	9,289	17,637	20,985	20,870	30,482	28,379
Japan	1,027	5,705	17,936	20,348	18,227	21,716	35,513
Australia	2,971	1,749	2,445	2,446	2,800	2,598	5,039
Sri Lanka	1,968	1,279	2,565	3,182	2,124	801	979
Germany (West)	—	1,797	2,989	3,231	3,710	6,228	8,225
Canada	1,379	2,027	2,634	2,796	3,941	2,820	3,078
Burma	2,446	357	2,085	1,403	1,078	436	154
Egypt	587	2,705	3,464	5,637	2,307	3,172	1,482
France	910	1,103	2,172	1,798	2,421	4,590	4,859
Argentina	1,065	415	70	334	600	77	642
Sudan	418	817	1,985	3,827	5,180	2,071	1,857
Malaysia[1]	550	1,259	826	1,173	1,173	934	2,408
Singapore	3,068	—	1,584	1,763	1,760	1,784	4,293
Netherlands	1,016	791	1,118	1,398	1,476	3,540	7,086
Czechoslovakia	1,008	1,593	3,009	2,946	3,049	4,610	4,165
Kenya	641	486	775	787	789	550	1,012
Italy	1,500	939	1,294	1,401	2,422	4,885	6,837
Nigeria	462	400	281	862	989	965	1,124
Cuba	negl.	29	1	16	negl.	1	—
New Zealand	367	657	584	597	1,029	825	1,340
Bangladesh	—	—	—	—	4,279	16,824	5,873
Indonesia	42	82	404	410	321	530	2,675
TOTAL (including other countries)	60,064	80,564	1,41,328	1,53,516	1,60,822	1,97,083	2,48,322

[1] Figures for 1965-66 relate to Malaysia including Singapore.

Note: The export figures from November 1970 onwards are based on the original copy of the shipping bill after an adjustment made for short and shut out shipment returns received during the period. As such these are not comparable to the export figures for a period prior to October 1970 which were based on the finally passed shipping bills.

directions have been reinforced with special programmes for promoting exports to the expanding markets of the oil exporting countries.

EXPORT PROMOTION

To impart dynamism to the country's efforts to expand and diversify the exports, a series of measures have been put into operation. These cover finance for export assistance and incentives, transport facilities, training in market research, rationalisation of institutional arrangements and technical services including some with the help of UN agencies and friendly countries. Other facilities provided include release of foreign exchange for specified purposes, import replenishment, priority in allotment of scarce raw materials, in some cases at concessional prices, drawback of import and excise duties and other general and specific reliefs in line with international trade practices.

The government and the Reserve Bank have taken measures from time to time to facilitate credit for exporters at reasonable interest. Exporters can obtain both pre-shipment and post-shipment advances from commercial banks at concessional rate of interest. Refinance is also available from the Reserve Bank for such advances. The Industrial Development Bank of India makes advances to exporters of capital goods and machinery in association with commercial banks.

To help exporters meet the competition in foreign markets, develop marketing competence and neutralise the disadvantages inherent in the present stage of the development of the economy, a scheme has been put in force under which cash compensatory support is offered on the exports of selected non-traditional industrial products. Enhanced compensatory support is available in selected cases with substantial export promise.

Important indigenous raw materials required for export production in certain selected engineering, chemical and other industries are allotted on a priority basis at international prices. Prime iron and steel, the main raw material for engineering exports, is made available at international prices under an inter-industry arrangement. Similarly, indigenous plastic raw materials are made available at international prices to exporters of plastic goods.

Organisations

The Government of India has established several specialised organisations for export promotion. The more important of these are briefly described below.

The *Board of Trade*, which was set up in 1962, deals mainly with the problems and policies relating to the development of the country's foreign trade. From time to time it makes recommendations to the central government on such matters as (i) expansion of production; (ii) product development; (iii) improvements in export marketing mechanism and media; and (iv) provision of commercial services to the commercial community with regard to export programmes.

The *Trade Development Authority*, New Delhi, has been established to induce and organise entrepreneurs, largely in the medium and small scale, to develop their individual export capabilities.

The *Federation of Indian Export Organisations*, New Delhi, co-ordinates and supplements the export promotion activities of various organisations and institutions such as, Export Promotion Councils, Commondity Boards, Chambers of Commerce, trade associations and other specialised bodies.

Export Promotion Councils aim at securing the co-operation of

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consumers, producers and exporters in the country for export promotion. The Councils perform both advisory and executive functions. During 1974-75, 17 such Councils were functioning.

Commodity Boards are statutory bodies and are responsible for production, development and export of certain commodities. At present, six such Boards are in existence dealing with tea, coffee, cardamom, rubber, coir and silk (see also chapter 'Industry').

Besides Export Promotion Councils and Commodity Boards, there are recognised *Export Houses* which specialise in export trade. A revised scheme for recognition of export houses was put into effect from 1 July 1968. Under the scheme, companies registered under the Indian Companies Act and co-operative societies and federations with a sound financial base and experience in export trade (with a minimum annual export performance of Rs 25 lakhs in the case of non-traditional products and Rs 2 crores in the case of traditional products) are eligible for recognition as export houses. Recognised export houses are entitled to government assistance from the Marketing Development Fund for a wide range of their activities.

The *Indian Institute of Packaging*, Bombay, established in 1966, undertakes research on raw materials for the packaging industry. It organises training programmes on packaging technology and consultancy services for the industry.

The *Indian Institute of Foreign Trade*, New Delhi, an autonomous organisation under the Societies Registration Act, is primarily concerned with developing training programmes, research and market studies.

The *Export Inspection Council*, Calcutta, is a statutory body set up under the Export (Quality Control and Inspection) Act, 1963 to adopt measures for the introduction and enforcement of quality control and compulsory pre-shipment inspection of various exportable commodities. Quality control of textile goods and machinery is conducted by the Textiles Committee, set up under the Textiles Committee Act, 1963.

The *Indian Council of Arbitration*, New Delhi, was set up in 1965 to promote arbitration for settling commercial disputes and to popularise arbitration among traders, particularly those engaged in international trade.

A statutory board called the *Marine Products Export Development Authority* was set up in 1972 at Cochin for the development of the marine products industry with special reference to exports.

An *Export Processing Zone* has been set up at Santa Cruz, Bombay, to promote the export of electronic equipments and components. It is entirely an export-oriented project and the units admitted to it will be obliged to export cent per cent of their production.

The *Handicrafts and Handlooms Export Corporation*, a subsidiary of the State Trading Corporation, and the Indian Motion Pictures Export Corporation are engaged in promoting exports in their respective fields.

The *Directorate of Exhibitions and Commercial Publicity* undertakes publicity for Indian goods by organising India's participation in international trade fairs and exclusive Indian exhibitions abroad. Participation in international trade fairs and exhibitions in overseas countries is arranged by the Ministry of Commerce and the Indian Council of Trade Fairs and Exhibitions, Bombay. Besides, the Export Promotion Councils and Commodity Boards also organise participation in specialised fairs and exhibitions abroad. Trade centres

and showrooms have been set up at important foreign commercial centres which conduct visual publicity of exportable goods.

TRADE AGREEMENTS

To forge close commercial relations, India has entered into trade agreements with a number of countries. From time to time, trade and economic delegations are also exchanged with other countries with a view to increasing and diversifying the flow of trade both in pattern and direction.

During 1974-75, new trade and payments agreements were concluded with the Democratic People's Republic of Korea, Bulgaria, Czechoslovakia and Poland. The validity of the existing trade agreement with Mongolia was extended for a further period of three years. An agreement for trade promotion and economic cooperation was signed with the Republic of Korea in August 1974. The existing agreement with the Democratic Republic of Vietnam was extended pending consideration of the question of entering into a long term trade and payments agreement with that country. Trade arrangements with Iraq for 1974-75 were also finalised. Draft of a trade agreement with Tunisia was initialled in February 1975. A five-year Indo-Iranian trade agreement came into force in December 1975. It provided for the most favoured nation treatment in mutual trade.

Annual trade protocols for 1975 were concluded with USSR, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania and the Democratic People's Republic of Korea during 1974-75.

Under a trade protocol signed in New Delhi in December 1974 between India and Bangladesh it was agreed that payments in connection with trade between the two countries would be made in freely convertible currency with effect from 1 January 1975. No value ceilings were prescribed for total imports/exports from either country.

A trade agreement, signed with Pakistan at Islamabad in January 1975, provided for trade between the two countries through goverment controlled agencies. It stipulated that goods imported by one country from the other should not be re-exported to third countries and that payments should be made in freely convertible currency. The agreement initially valid for one year could be renewed for a further period of two years.

In 1974-75, a special payment arrangement was entered into with Burma when a Burmese trade delegation visited India in August 1974. The implementation of this arrangement was reviewed when the Indian delegation visited Burma in May 1975.

Indian Trade delegations visited many East European countries and similarly their trade delegations visited India during 1974-75 for concluding trade agreements, review trade protocols and sign fresh protocols. Delegations from the Netherlands, Finland, France and Yugoslavia also visited India for the meetings of joint committees and commissions.

An Indian delegation headed by the Commerce Minister visited USA and Canada to explore *inter alia* prospects of Indian exports to those countries. Following the visit to India in October 1974 of the US Secretary of State, Dr Henry Kissinger an Indo-US Joint Commission for Economic, Commercial, Scientific, Technological, Educational and Cultural Co-operation was set up. Under this, three sub-commissions were also set up and one of them, namely, the Economic and Commercial Sub-Commission held its first meeting in Washington in January 1975.

STATE TRADING

For increasing State participation in the country's export and import trade, a number of public sector agencies have been set up. A brief description of some of the important agencies is given below.

State Trading Corporation

The State Trading Corporation of India Ltd. (STC) was registered in 1956 under the Indian Companies Act. Its main objective is to enlarge the scope of India's exports and to arrange for essential imports. Its activities are directed towards the diversification of exports, expansion of existing markets and development of new markets for traditional and non-traditional products. It also often undertakes price support and buffer stock operations in certain commodities. The Corporation works in close co-operation with the government, the trade and industry.

The STC group now includes STC, Cashew Corporation of India (CCI), Handicrafts and Handloom Exports Corporation (HHEC) and Projects and Equipment Corporation (PEC). From a small beginning in 1956-57, when the turnover of STC group was Rs 9.2 crores, there has been a rapid growth in turnover to Rs 879 crores (provisional) in 1974-75 consisting of Rs 600 crores of exports, Rs 275 crores of imports and Rs 4 crores of domestic trade.

In 1974-75 STC's turnover grew by 61 per cent, PEC's by 67 per cent, HHEC's by 30 per cent and CCI's by 6 per cent over the previous year.

STC exports a wide range of products such as sugar, rice, castor oil, leatherware, bulk commodities such as cement and salt, textiles and manufactured products.

Though originally set up as an agency to handle trade with Eastern Europe, STC is now handling trade with other areas also. Its export trade in 1973-74 comprised 35 per cent with Eastern Europe, 34 per cent with Western Europe and 16 per cent with the countries covered by the Economic and Social Council for Asia and the Pacific (ESCAP). In 1974-75, half of the increase in exports went to West Asia and a quarter to Africa.

STC promotes exports of the products of small and medium scale industries through assistance in finance, quality control, raw materials and marketing.

The Corporation arranges imports of raw materials required for the country's economic and industrial development. Such imports include edible oil, hops, chemicals and alkalies, raw wool, synthetic yarn, newsprint and many other items.

STC maintains a network of offices at Beirut, Belgrade, Budapest, Buenos Aires, Colombo, Dacca, East Berlin, Frankfurt, Hongkong, Kuwait, Lagos, London, Moscow, Nairobi, New York, Paris, Prague, Singapore and Sydney.

Projects and Equipment Corporation

The Projects and Equipment Corporation of India Ltd. was formed in 1971 as a subsidiary of the STC consisting of the Engineering and Railway Equipment Divisions of STC.

The main objectives of the Corporation are to boost the export of engineering, industrial and railways equipment, to penetrate new markets and to foster export ventures and turn-key projects.

During 1973-74, the turnover of the Corporation was Rs 18.5 crores. The turnover for 1974-75 is expected to be Rs 29.7 crores.

Cashew Corporation of India

Set up in 1970 as a subsidiary of the STC, the Cashew Corporation of India ensures steady supplies of imported raw cashewnuts at fair

prices to the export-oriented cashew processing industry. During 1973-74, the turnover of the Corporation was Rs 34.9 crores. The turnover for 1974-75 is expected to be about Rs 40.0 crores. The Corporation has two offices, one in Paris and the other in New York, which carry out export publicity for Indian products.

Handicrafts and Handlooms Export Corporation

The Handicrafts and Handlooms Export Corporation, a subsidiary of STC, promotes the export of Indian handloom and handicraft products and ready-to-wear garments, besides the canalised export of woolen knit-wear. During 1973-74, its total exports were Rs 20.5 crores, including knit-wear exports totalling Rs 14 crores as against Rs 5.65 crores in 1972-73. Between January and September 1974, the total turnover of the Corporation amounted to Rs 19.50 crores as compared to Rs 11.62 crores during the corresponding period in the previous year, an increase of 68 per cent.

Minerals and Metals Trading Corporation

The Minerals and Metals Trading Corporation (MMTC) set up in 1963, is the premier international trading house in the public sector for expanding the exports of mineral ores from the country. The total trade turnover of the Corporation during 1974-75 was estimated to be about Rs 737 crores, exports amounting to Rs 138 crores and imports Rs 597 crores.

Mica Trading Corporation

The Mica Trading Corporation of India Ltd. Patna, was incorporated in 1973 as a subsidiary of the MMTC to handle the mica trade exclusively. An important objective of the Corporation, which started functioning from 1 June 1974, is to advise the small exporters on free participation in export trade which had hitherto been dominated and monopolised by a few big mine owners and exporters.

EMERGENCY STEPS

A new dimension was added to India's export thrust since the proclamation of the Emergency. As many as 30 new projects with high export potentialities were identified by the Project Planning Cell of the Commerce Ministry, set up in the first week of July 1975. Compensatory support was extended to several non-traditional export items also.

Package Measures

A package of export promotion measures was adopted by the Government to increase the country's foreign exchange earnings and reduce the balance of payment deficit. Certain schemes like simplification of export procedures, payment of duty drawbacks through commercial banks, exemption from duty on meterials imported against advance licences subject to export obligation, liberalisation of export financing and abolition of export duty on certain items were put into operation.

Compensatory Support

There was a review of progress of exports in the light of the current international market conditions, the country's production capabilities and the needs of the domestic market. Following the review, it was thought that some compensatory support was necessary in respect of select items having growth potential but needing help to get established. After due consideration, a scheme for giving appropriate assistance to select items was evolved. The items included among others finished leather and shoes, garments, woollen carpets and durries, synthetic fabrics and garments, processed food and canned and frozen marine products, jute carpet backing and jute specialities, coir products, handicrafts, instant tea, packet tea and tea bags, instant coffee,

industrial fasteners and machinery, wagons and coaches, rubber toys with nylon cord, and basic chemicals. The assistance was made applicable to exports shipped after 1 October 1975 and up to 31 March 1976.

Rationalisation of Export Procedures

Steps have been taken for simplification of and rationalisation in export control regulations. In respect of as many as 190 items, the licensing formalities have been dispensed with. The export control procedures have been further simplified.

An important change is that the fee payable on export applications has been abolished.

INTERNAL TRADE

The internal trade of India is many times larger than its external trade, owing to the vastness of the country, its varied climate and diverse natural resources.

The internal trade can be classified under five broad heads. These are: (i) rail-borne trade, (ii) river-borne trade, (iii) coasting trade, (iv) trade borne on other craft, and (v) trade by air. Complete and precise data about internal trade are not available because reliable statistics pertaining to items (iv) and (v) are not available.

Rail-and-River Borne Trade

Statistics of rail-and-river borne trade are based on the invoices of the railways and steamer companies. Till March 1965, they were recorded on 'import' basis but since then they are being recorded on 'export' basis. For the purpose of these statistics, India is divided into a number of trade blocks, roughly representing the states of the Indian union. The chief port towns of Bombay, Calcutta, Cochin and Madras are constituted as separate trade blocks. Similarly, the less important ports are grouped as 'other ports', each of which is treated as a separate trade block.

Table 19.8 shows the movement of selected articles by rail and river between different trade blocks[1] for selected years between 1960-61

TABLE 19.8 RAIL-AND-RIVER-BORNE TRADE

('000 *quintals*)

Commodity	1960-61	1965-66	1971-72	1972-73	1973-74
Coal and coke ..	3,14,796	3,31,919	3,34,392	3,34,498	3,01,555
Raw cotton ..	3,719	3,143	2,572	4,097	3,195
Cotton piecegoods ..	2,643	2,563	1,106	1,110	910
Rice (not in husk) ..	22,283	16,898	27,663	23,428	22,774
Wheat ..	30,642	45,959	51,864	61,383	51,473
Raw jute ..	4,015	4,615	6,642	5,249	4,368
Iron & steel products ..	37,025	73,432	80,402	89,391	78,846
Oilseeds ..	9,509	7,796	8,393	9,266	7,278
Salt ..	13,539	20,860	23,487	24,585	21,057
Sugar (excluding khandsari sugar) ..	9,106	10,492	11,383	10,266	11,579

Note: The above statistics relate to quantities only as value figures are not recorded in the railway and steamer companies' invoices. Besides, the trade carried by only one steam company between three trade blocks was recorded from April 1960 to August 1965. The company suspended its river service from September 1965. Inland trade data for 1972-73 cover river-borne trade carried by the Inland Water Transport Corporation Limited. Further, non-trade freight movements are also included because of the difficulty of isolating them.

[1] Up to March 1962, India was divided into 29 trade blocks. The number increased to 31 in April 1962, consequent on the bifurcation of Bombay State and further to 32 in April 1964 after the formation of the State of Nagaland. The number went up to 34 in April 1967 after Haryana was formed and Chandigarh became a centrally-administered territory.

and 1973-74. The internal trade of each block is not included in these figures.

Coasting Trade

Coasting trade is recorded under two broad heads, (i) internal trade, *i.e.*, trade amongst the ports within the same maritime block, and (ii) external trade, *i.e.*, trade between one maritime block on the one hand and all other maritime blocks on the other. Table 19.9 shows the value of coast-wise trade of India in selected years since 1960-61.

TABLE 19.9
COAST-WISE TRADE

(*Rs lakhs*)

	1960-61	1967-68	1968-69	1969-70[1]
Imports				
Indian merchandise	17,105	21,176	17,044	18,127
Foreign merchandise[2]	361	—	—	—
Treasure	—	106	103	—
Total Imports	17,466	21,282	17,147	18,127
Exports				
Indian merchandise	17,683	21,176	17,044	18,127
Foreign merchandise	442	—	—	—
Treasure	—	106	103	—
Total Exports	18,125	21,282	17,147	18,127
TOTAL TRADE	35,591	42,564	34,294	36,254

[1]Figures are provisional.
[2]The distinction between Indian and foreign merchandise was abolished from April 1964.

20 TRANSPORT

RAILWAYS

The Indian railway system is the largest in Asia and the fourth largest in the world. It is also the biggest public undertaking in the country. The railways, during 1973-74, had a route length of 60,234 km. They ran daily 10,800 trains, covering a distance of about 12 lakh km, operated 7,079 stations, carried over 73 lakh passengers and about 5.5 lakh tonnes of freight. The operational fleet consisted of 11,043 locomotives, 36,426 coaching vehicles and 3,88,026 wagons. They employed 14.3 lakh regular employees and about 3 lakh casual labourers. The total investment was Rs 4,791 crores and the revenue Rs 1,147 crores.

Progress under the Plans

As a result of planned development since 1951, both the passenger and goods traffic have more than doubled. The number of locomotives has increased by 35 per cent, coaching vehicles by 86 per cent and wagons by about 89 per cent.

There has also been a progressive increase in expenditure on the development of railways under the Five Year Plans. It was Rs 423.23 crores, Rs 1,043.69 crores, Rs 1,685.8 crores in the First, Second and Third Plans respectively. In the Fourth Plan, the expenditure was Rs 1,419.76 crores. The proposed outlay under the Fifth Plan is Rs 2,350 crores, besides Rs 200 crores allocated for transport projects in the metropolitan cities of Bombay, Calcutta, Delhi and Madras.

Tables 20.1 and 20.2 show the progress of the government railways for selected years since 1950-51.

TABLE 20.1
PROGRESS OF GOVERNMENT RAILWAYS

Year	Route length (kilometres)			Running track (km)	Passengers originating (lakhs)	Goods originating (lakh) tonnes)
	Electrified	Non-electrified	Total			
1950-51	388	53,208	53,596	59,315	12,840	930
1960-61	748	55,499	56,247	63,602	15,940	1,562
1965-66	2,423	55,976	58,399	68,375	20,820	2,030
1969-70	3,553	56,131	59,684	71,251	23,380	2,079
1970-71	3,706	56,084	59,790	71,669	24,311	1,965
1971-72	3,953	56,115	60,067	73,225	25,358	1,978
1972-73	4,055	56,094	60,149	73,664	26,530	2,013
1973-74	4,191	56,043	60,234	74,104	26,537	1,849

Modernisation of Railways

Tables 20.1 and 20.2 also show the trend towards modernisation of railways. The electrified route length has increased more than 10 times since 1950-51. Steam locomotives, production of which was discontinued from 1972, are being gradually replaced by electric and diesel locomotives. Since the beginning of the five year plans, the number of diesel locomotives has gone up by more than 90 times, from a mere 17 in 1951 to 1,532 in 1973-74, and of electric locomotives by more than nine times, *i.e.,* from 72 to 669. By 31 March 1974, diesel engines were operating over 27,996 route kilometres. Diesel and electric locomotives together carried 78.1 per cent of the total goods traffic in terms of net tonne km in 1973-74 (10 per cent in 1960-61), although, in terms of numbers, these were only 20 per cent of all locomotives on line. Modernisation and improvement of signalling

and telecommunications have also made much headway. In 1973-74, the multi-channel microwave link was in operation on 7,506 km and in progress on 8,423 km.

TABLE 20.2
ROLLING-STOCK

Year	Number of locomotives				Number of coaching vehicles[1]	Number of wagons
	Steam	Diesel	Electric	Total		
1950-51	8,120	17	72	8,209	19,628	2,05,596
1960-61	10,312	181	131	10,624	28,439	3,07,907
1965-66	10,613	727	403	11,743	32,892	3,70,019
1969-70	9,700	1,091	552	11,343	34,811	3,83,891
1970-71	9,387	1,169	602	11,158	35,145	3,83,990
1971-72	9,222	1,288	639	11,149	35,561	3,82,725
1972-73	8,963	1,431	668	11,062	35,836	3,84,283
1973-74	8,842	1,532	669	11,043	36,426	3,88,026

[1] Includes electric multiple units.

Improvement in the standards of track for higher speeds on trunk routes and important mainlines is being brought about with the help of track recording cars, which are now being produced by the railways themselves. The improvement in the standard of track has enabled Delhi-Howrah and New Delhi-Bombay Rajdhani Express trains to run at speeds of 130 and 120 km per hour respectively. Some other mail and express trains are also running at 100 to 110 km an hour. Trials have also been undertaken to raise the speed of metre gauge trains from the present 75 km to 100 km an hour. So far, about 15,000 km of track on trunk routes and main lines have been brought up to the standards for operation of speeds above 100 km an hour.

Manufacture of Rolling-stock

The Ministry of Railways have set up three units for the production of locomotives and coaches. They are the Locomotive Works at Chittaranjan, the Diesel Locomotive Works at Varanasi and the Integral Coach Factory at Perambur.

The Chittaranjan unit began production in 1950 and had delivered 2,351 steam locomotives up to the end of December 1972 when their production was discontinued. Since 1961, it has been producing electric locomotives. Up to 31 March 1975, it had produced 423 AC and 71 DC and 1 AC/DC broad gauge electric locos. In addition, it also produced 241 diesel shunting locomotives and 10 ZDM-3 narrow gauge diesel locos. The indigenous content is about 84 per cent in the case of electric locomotives and about 75 per cent for diesel shunters.

The Diesel Locomotive Works, Varanasi, set up in 1964, started with assembling diesel locos from imported components. The first loco from this unit was commissioned in the same year. Up to the end of March 1975, it had turned out 621 BG and 163 MG locomotives in addition to 5 OBO diesel shunters and 21 WDS-5 dieselelectric shunters and 5 WDS-6 prototype shunters. The indigenous content of BG locos is 87.3 per cent and that of MG locos 88.8 per cent.

The Integral Coach Factory, Perambur, went into production in 1955. Originally designed to produce broad gauge coach shells, it has diversified its production to turn out furnished coaches, both broad and metre gauge, electric multiple units, diesel rail cars and air-conditioned coaches. Up to 31 March 1975 it had produced 10,708 passenger coaches (unfurnished shells) and the furnishing unit, which was added in 1957-58, had equipped 8,713 coaches. In addition, the Bharat Earth Movers Ltd., Bangalore, a public sector undertaking, produced about 253 broad gauge coaches and Jessop and Co. Ltd., Calcutta, turned out 138 metre gauge coaches and 69 EMU coaches in 1974-75.

Wagon requirements of the railways are largely met by the private sector and to some extent by the railway repair workshops. There are 13 units with an annual installed capacity of 30,625 wagons (in terms of four wheelers) in the private sector and three railway workshops with a capacity of approximately 4,000 units annually. The production of wagons in 1974-75 was 10,958.5 units.

To step up wagon production, the central government has taken over a number of sick units in the private sector.

Passenger Traffic and Amenities

The passenger traffic was over 265 crores in 1973-74 as against 12.8 crores in 1950-51. The earnings from the III class passengers were Rs 320.57 crores in 1973-74 as compared to Rs 84.47 crores in 1950-51.

The average rate charged per passenger for every kilometre was 2.09 paise (ordinary) and 3.09 paise (mail/express) for III class passengers, 5.12 paise (ordinary) and 6.56 paise (mail/express) for II class, 7.72 paise for I class and 22.5 paise for air conditioned class passengers. The rates for III class passengers were among the lowest in Asia.

Since passengers travelling by III class[1] form the bulk of the railway users and are also the main source of income, more and more amenities have been provided for them. Thirty-six Janata trains are run exclusively for them. Two-tier and three-tier sleeper coaches have been introduced for their convenience on all mail and express trains. All-steel and light-weight integral type coaches have been provided for safe and comfortable travel.

The task of providing basic amenities, such as, proper booking arrangements, waiting halls and drinking water supply at all stations was completed in 1970-71. Catering arrangements are available at 2,991 stations and 50 pairs of trains. Ready-to-serve food is supplied on several trains and the sale of cheap food packets was in force at 29 important stations.

Goods Traffic

The railways carried over 18.49 crore tonnes of goods in 1973-74 as compared to 9.3 crore tonnes in 1950-51. The freight revenue was Rs 644.2 crores in 1973-74. The principal commodities carried by the railways are shown in Table 20.3.

TABLE 20.3 PRINCIPAL COMMODITIES CARRIED BY RAILWAYS

('000 tonnes)

Commodity	1950-51	1960-61	1965-66	1972-73	1973-74
Coal	30,911	50,396	66,741	66,914	62,045
Cement	2,471	6,548	8,649	10,526	10,021
Iron and steel	2,750	7,588	10,077	10,204	9,282
Metallic ores (other than manganese ore)	3,055	11,140	18,623	22,691	21,107
Manganese ore	881	1,230	1,497	1,385	1,080
Foodgrains	7,805	12,659	14,514	15,790	14,648
Raw jute	470	644	763	616	591
Tea	265	250	203	194	199
Paper and paper products	193	442	670	930	842
Jute manufactures	271	263	275	473	412
Raw cotton	525	536	485	407	447
Cotton textiles	477	380	308	168	148
Oilseeds	1,595	1,517	1,470	1,250	1,021
Sugarcane	2,819	3,237	2,717	1,575	1,818
Sugar	933	1,488	1,543	1,187	1,382
Salt	1,576	1,981	2,569	2,700	2,339
Chemical manures	589	1,394	2,452	5,385	5,315
Mineral oil	2,692	4,700	7,495	10,181	9,994

[1]From 1 April 1974 the III class has been redesignated II class. The old II class is abolished.

To speed up movement of freight, many fast goods trains have been introduced on important routes. The first daily super parcel express between Delhi and Calcutta, covering the distance in 34 hours, was introduced in 1973.

To provide door-to-door service, a container service is also operated. The containers are carried on guaranteed schedules by fast goods trains. The service, at present, covers Bombay-Ahmadabad, Bombay-New Delhi, Madras-Bangalore, Calcutta-New Delhi, Bombay-Madras, Bombay-Secunderabad, Bombay-Bangalore, Calcutta-Bombay, Calcutta-Madras, Bombay-Kota and New Delhi-Madras-Bangalore routes.

Administration

The responsibility for the administration and management of government railways vests in the Railway Board under the overall supervision of a cabinet minister. The Board consists of a chairman, who is *ex-officio* Principal Secretary to the Union Ministry of Railways, a Financial Commissioner and three other members, who are all *ex-officio* Secretaries to Government of India in the Ministry of Railways.

Railway Zones

The railways are divided into nine zones, each headed by a General Manager, who is responsible to the Railway Board for operation, maintenance and financial matters.

The nine zones, with their headquarters and the route kilometres in brackets are: Central (Bombay-VT, 6,016), Eastern (Calcutta, 4,235), Northern (New Delhi, 10,688), North-Eastern (Gorakhpur, 4,977), North-East Frontier (Maligaon-Gauhati, 3,628), Southern (Madras, 7,452), South-Central (Secunderabad, 6,175), South-Eastern (Calcutta, 6,926), and Western (Bombay-Churchgate, 10,150).

Co-operation between the public and the railway administration is secured through various committees including (i) National Railway Users' Consultative Council; (ii) Zonal Railway Users' Consultative Committees; and (iii) Divisional Railway Users' Consultative Committees.

Railway Finances

Since 1924-25 railway finances remain separated from general revenues. They have their own funds and accounts and the railway budget is presented separately to Parliament. However, the Railways contribute to the general revenues a fixed rate of dividend on the capital invested. The quantum of contribution, which at present includes the dividend, payment in lieu of the merger of passenger tax with passenger fares and contribution to the Railways Safety Works Fund, is reviewed periodically by a Parliamentary Convention Committee. So far, six such committees have been appointed.

Table 20.4 gives an outline of government railway finances for selected years since 1955-56.

Staff Welfare

Several schemes are in operation for the welfare of the railway employees who numbered 14.3 lakhs in 1973-74 as against 9.1 lakhs in 1950-51. Among the important amenities are the provision of housing and medical facilities, holiday homes at hill stations and schools and hostels. Between 1951 and 1973 (31 March), over two lakh residential units, 98 hospitals and 561 health centres were constructed for the staff. The number of holiday homes at hill stations and other places was 23. The cost of the welfare schemes during 1972-73 was Rs 13.22 crores which was about ten times the amount spent in 1950-51.

(*Rs. crores*)

TABLE 20.4
GOVERNMENT RAILWAY FINANCES

Item	1955-56	1960-61	1965-66	1973-74	1974-75 Revised Estimates	1975 76 Budget Estimates
Passenger earnings						
Upper classes	12.85	15.18	27.64	43.42	38.89	466.68
Third class[1]	94.86	116.41	191.53	323.73	366.96	430.38
Other coaching earnings	20.87	27.21	39.40	59.35	68.58	76.10
Goods earnings	180.28	286.14	465.49	680.41	899.82	1,084.50
Other sundry earnings	6.81	12.63	22.25	40.09	38.90	397.00
Total Earnings	315.67	457.57	746.31	1,147.00	1,413.15	1,676.86
Suspense	+0.62	—0.77	—12.74	—9.11	—12.00	—6.00
Gross traffic receipts	316.29	456.80	733.57	1137.89	1,401.15	1,670.86
Ordinary working expenses	212.95	313.15	485.85	935.33	1,191.55	1,298.28
Appropriation to depreciation reserve fund	45.00	45.00	85.00	115.00	115.00	115.00
Appropriation to pension fund	—	—	12.00	15.85	15.85	16.80
Payment to worked lines	0.27	0.09	0.19	0.15	0.15	0.17
TOTAL working expenses	258.22	358.24	583.04	1,066.33	1,322.56	1,430.25
Net miscellaneous expenditure	7.73	10.69	15.69	16.15	17.46	19.70
Net railway revenues	50.34	87.87	134.84	55.41	61.14	220.91
Payment to General Revenues	36.12[2]	55.86[2]	116.28	170.92	189.32	197.88
Net surplus (+) or deficit (—)	+14.22	+32.01	+18.56	115.51	128.19	+23.03
Operating ratio (per cent)	81.6	78.4	79.5	—93.70	—94.40	85.60
Capital-at-charge	968.98	1,520.87	2,680.32	3,893.38	4,098.70	4,271.20

[1]From 1 April, 1974, the III class has been redesignated II class and the old II class has been abolished. [2] Dividend only.

Research and Training

The Research, Designs and Standards Organisation (RDSO) was set up in 1957 for achieving self-sufficiency in the designing and manufacture of railway equipment. The RDSO was formed by the merger of the Central Standards Office and the Railway Testing and Research Centre. It has its headquarters at Lucknow with branches at Lonavla and Chittaranjan.

Over the years, the RDSO has helped the railways in indigenisation in all fields of railway operations and has also made it possible for them to export a number of items of railway equipment. It has recently produced an all-aluminium overhead equipment for railway electrification, which is the first such equipment made entirely from aluminium in the world. In the field of locomotion, RDSO has developed a completely indigenous design for a 3,600 HP electric locomotive which is under production at Chittaranjan.

The railways have four major training institutions. They are:

(i) Railway Staff College, Vadodara, (ii) Indian Railways Institute of Advanced Track Technology, Pune, (iii) Indian Railways Institute of Signal Engineering and Telecommunications, Secunderabad and (iv) Indian Railways Institute of Mechanical and Electrical Engineering, Jamalpur. These institutions also train officials from foreign countries.

Non-Government Railways

Apart from government railways, some private agencies were operating 207 route km of railway lines on three routes (all narrow gauge lines) on 31 March 1974.

ROADS

The Indian road network is one of the largest in the world. In 1972-73, the road length[1] was 11.5 lakh km as against 4 lakh km in 1950-51. The road development programme in the Fifth Plan will lay emphasis on (i) completion of works spilling over from the Fourth Plan; (ii) widening of four-lanes of certain sections of the national highways; (iii) construction of byepasses around congested cities, replacing railway level crossings with over-bridges or under-bridges, strengthening of pavements and widening of two-lanes of certain remaining single lane sections; (iv) removal of missing links; and (v) development of rural roads under the Minimum Needs Programme.

Plan Expenditure

In the first three Plans and the three Annual Plans, a sum of Rs 1,134.86 crores was spent on road development. The Fourth Plan expenditure is estimated at Rs 822.37 crores. The proposed outlay for the Fifth Plan for central and state sectors is Rs 1,774 crores.

Table 20.5 shows the progress of road construction for selected years since 1951.

TABLE 20.5 PROGRESS OF ROAD CONSTRUCTION

('000 kilometres)

Type of Road	1950-51	1960-61	1965-66	1971-72	1972-73
Surfaced	157	263	343	472	474
Unsurfaced	243	261	427	658	680
TOTAL	400	524	770	1,130	1,154

In terms of area and population, the total road length in the country in 1972-73 worked out to about 36.1 km for every 100 sq. km of area and 201 km for every one lakh of population. The surfaced road length was 14.8 km for every 100 sq. km of area and 83 km for every one lakh of population.

National Highways

The central government is directly responsible for the national highways system. In 1947, approximately 2,575 km of roads called missing road links and thousands of culverts and bridges, which did not exist, were required to be constructed to have an integrated and continuous network. There was an increase in the missing road links owing to the addition of new roads to the national highways system in latter years. Up to 31 March 1974, missing road links constructed totalled 3,656 km and the number of bridges constructed was 217. The present national highways system includes roads of a total length of 28,870 km. An outlay of Rs 501 crores has been set aside in the Fifth Plan for the national highways system.

[1]Does not include road length of Sikkim.

State Sector Roads

State highways and district and rural roads are the responsibility of state governments. The length of surfaced roads, excluding national highways, maintained by various agencies in the states and union territories increased by about 49,000 km between 1971 and 1973. A provision of Rs 500 crores has been proposed in the Fifth Plan for developing rural roads under the Minimum Needs Programme, the objective being to link all villages with a population of 1,500 and above with all-weather roads. In coastal, hilly or tribal areas, where the population is sparse, all-weather roads will be provided to clusters of villages with a viable population.

The central government assists in the development of certain arterial roads in the states, such as the 1,400-km long Bareilly-Amingaon Lateral Road passing through the States of Assam, Bihar, Uttar Pradesh, and West Bengal.

The road length in the states and union territories in 1972-73 is given in Table 20.6.

TABLE 20.6
LENGTH OF ROAD IN INDIA (1972-73)

(*kilometres*)

State/Union territory	Surfaced roads[1]	Unsurfaced roads[1]	Total[1]
Andhra Pradesh	47,866	32,943	80,809
Assam	6,474	24,359	30,833
Bihar	31,752	79,184	1,10,936
Gujarat	24,283	21,247	45,530
Haryana	13,526	11,250	24,776
Himachal Pradesh	2,983	10,216	13,199
Jammu and Kashmir	5,748	8,599	14,347
Karnataka	50,999	34,434	85,433
Kerala	27,712	96,520	1,24,232
Madhya Pradesh	34,544	53,027	87,571
Maharashtra	46,939	55,558	1,02,497
Manipur	1,245	7,406	8,651
Meghalaya	1,065	8,241	9,306
Nagaland	1,065	4,275	5,340
Orissa	11,915	34,411	46,326
Punjab	15,106	6,409	21,515
Rajasthan	23,830	19,947	43,777
Sikkim	NA	NA	NA
Tamil Nadu	57,603	41,008	98,611
Tripura	974	2,879	3,853
Uttar Pradesh	37,644	86,217	1,23,861
West Bengal	23,395	33,251	54,646
Union Territories	9,339	8,500	17,839
TOTAL[2]	4,74,007	6,79,881	11,53,888

[1]Provisional. [2]Does not include the road length in Sikkim.

Border Roads

The Border Roads Development Board was set up in 1960 to accelerate the economic development of the north and north-eastern border areas by making them accessible through the development of arterial routes. The Board's programme includes the construction of about 7,500 km of new roads, improvement of about 6,250 km of the existing roads and surfacing of about 11,330 km of roads. Of this 7,003 km of new roads have been constructed, 4,244 km of existing roads improved and 7,629 km of roads surfaced.

The Border Roads Organisation has constructed the world's highest road from Manali in Himachal Pradesh to Leh in Kashmir. The average altitude of the terrain is 4,270 metres and the road negotiates for passes at heights ranging from 4,875 to 5,485 metres.

Road Research

The Central Road Research Institute, New Delhi, was set up in 1952

for research on road engineering. It also advises state governments on problems concerning road works. A Highway Research Station at Madras carries out research on the design and construction of highways. The Roads Wing of the Union Ministry of Shipping and Transport deals, among other things with the type designs for route making for the national highways, principles to be followed in the erection of advertisement boards on roadsides, form of recording data on bridges, scrutiny of designs for bridges and assessment of requirements of road-rollers and other road making machinery. The central government gives assistance to the Indian Roads Congress for co-ordinating the activities of various research laboratories.

Road Transport

Motor Vehicles

The total number of motor vehicles on roads on 31 March 1974 was 20.88 lakhs, nearly ten times that in 1947. These included 7.93 lakh motor cycles and auto-rickshaws, 6.23 lakh private cars and jeeps, 1.73 lakh public service vehicles including taxis and 4.99 lakh goods vehicles. Maharashtra had the maximum number of vehicles followed by Uttar Pradesh and Delhi. The state-wise breakup of motor vehicles is given in Table 20.8.

Nationalisation of Road Transport

Barring Goa, Daman and Diu and Pondicherry, most of the states and union territories have nationalised passenger traffic in varying degrees. In Gujarat, Himachal Pardesh, Maharashtra, Orissa and Delhi, nationalised buses run on most of the routes. In the country as a whole, 40.8 per cent buses were being run by the public sector undertakings on 31 March 1972. Statutory corporations have been set up under the Road Transport Corporations Act, 1950 in several states. In others, the nationalised services are operated by departmental and municipal undertakings or registered companies. In most of the big cities, bus services are state-owned.

Goods transport continues to be almost exclusively in the private sector except in certain areas. In Assam, Bihar, Orissa and West Bengal, the Central Road Transport Corporation, a public sector undertaking, carries out operations.

National Permits Scheme

Removal of constraints on the movement of transport vehicles has been one of the measures included in the 20-point economic programme announced by Prime Minister in 1975. For this purpose a scheme of national permits has been introduced. Under the scheme, the Central Government will specify the number of national permits each State or Union Territory can issue. However, the maximum number of permits to be issued initially will be about 5,300.

Passenger Vehicles

Passenger vehicles fleet in the public sector, during the last 20 years, has increased to over 50,000 from 7,000 and there has been persistent demand for more and more services particularly in metropolitan cities. About crore commuters are carried every day by the state transport undertakings which employ about 3.5 lakh persons.

Transport Bodies

To ensure co-ordination between the central and state policies and operation of the different modes of transport, the Government of India have set up a Transport Development Council. The Inter-State Transport Commission is responsible for the development, co-ordination and regulation of road transport services on inter-state routes. As a result of the efforts made by the Commission, almost all the states and union territories now have reciprocal arrangements

for operation of goods and passenger services on inter-state routes. They have introduced zonal permit schemes for the unhindered movement of a limited number of public goods carriers over the national and state highways on payment of tax at a single point. The national permit scheme, announced by the Prime Minister in her broadcast to the nation on 1 July 1975 as part of the 20-point economic programme, will carry this process considerably further by making the long distance movement of goods vehicles from one zone to another smooth and free of hold-ups.

An Association of State Road Transport Undertakings,set up in 1963,co-ordinates the activities of the undertakings and secures procedural uniformity, higher standards of service and economic operation.

The estimated share of roadways and railways with regard to total goods traffic in the country is shown in Table 20.7.

TABLE 20.7
RAIL-ROAD TRAFFIC RATIO

(In 10,000 lakh km.)

Year	Railways	Road Transport	Percentage share Railways	Percentage share Road Transport
1960-61	88	17	83.8	16.2
1965-66	117	34	77.5	22.5
1968-69	125	40	75.8	24.2
1973-74	147	65	69.3	30.7

Revenue

Various road and vehicle taxes brought in a revenue of Rs 914.38 crores in 1972-73. Of this, the centre's share was Rs 674.05 crores and that of states Rs 240..33 crores. Maharashtra got the maximum revenue from road and goods taxes followed by West Bengal and Tamil Nadu. The sources of revenue were: import duty on motor vehicles and accessories (Rs 32.82 crores), excise duty on motor vehicles (Rs 40.42 crores), excise duty on tyres and tubes (Rs 69.46 crores), import duty on tyres and tubes (Rs 2.51 crores), import duty on motor fuel (Rs 13.82 crores),excise duty on motor fuel (Rs 511.96 crores), motor vehicle taxes and fees (Rs 126.38 crores), sales tax on motor fuel (Rs 28.25 crores) and passenger and goods taxes (Rs 85.70 crores).

INLAND WATERWAYS

The length of navigable waterways in India is about 14,150 km, of which about one-fifth is navigable by steamers. Important among the navigable rivers are the Ganga and Brahmaputra and their tributaries; the Godavari and Krishna and their canals; the backwaters and the canals of Kerala; the Buckingham Canal in Andhra Pradesh and Tamil Nadu and the Mandovi and Zuari rivers in Goa.

The Fourth Plan expenditure on inland waterways was about Rs 11 crores as against the outlay of Rs 12 crores. An outlay of Rs 40 crores for central and state sectors has been proposed in the Fifth Plan for the development of inland waterways.

Inland Water Transport Bodies

The Central Inland Water Transport Board, New Delhi, formulates policy for the development of inland water transport in the country. The Inland Water Transport Directorate of the Union Ministry of Shipping and Transport gives technical advice to the states, which are responsible for the development of inland waterways.

The States of Andhra Pradesh, Assam, Karnataka, Kerala, Madhya

TABLE 20.8

DIFFERENT TYPES OF MOTOR VEHICLES ON ROAD

(as on 31 March 1974)

State/Union Territory		Motor Cycles	Auto-Rickshaws	Jeeps	Private Motor Cars	Taxis	Buses	Goods Vehicles	Miscellaneous Vehicles	Total
Andhra Pradesh	..	54,077	2,512	5,135	26,299	2,468	7,582	17,793	8,131	1,23,997
Assam (as on 31-3-73)		3,800	293	3,130	5,633	640	1,779	9,493	6,619	31,587
Bihar (as on 31-3-73)		28,233	363	11,300	15,691	3,972	4,184	21,481	5,108	90,322
Gujarat[3]		78,479	13,383	4,967	31,372	1,778	6,268	17,269	26,130	17,646
Haryana (as on 31-3-73)		8,601	947	1,124	2,216	105	1,119	4,591	7,884	26,527
Himachal Pradesh		NA	NA	NA	NA	NA	NA	NA	NA	NA
Jammu and Kashmir		4,048	364	1,425	3,241	1,312	1,593	3,749	154	15,886
Karnataka		21,511	9,263	3,078	27,002	1,524	4,714	11,917	9,775	88,784
Kerala		15,351	2,046	4,081	31,642	12,034	4,085	12,208	1,671	83,118
Madhya Pradesh (as on 30-9-73)		44,065	2,799	3,569	16,007	569	4,020	15,590	13,528	1,00,147
Maharashtra		1,27.424	14,457	15,296	1,35,443	29,545	12,422	57,797	24,820	4,17,204
Manipur (as on 31-3-73)		397	NA	929	237	NA	234	729	200	2,726
Nagaland		17	NA	61	21	NA	NA	98	NA	197
Orissa		11,833	187	4,861	6,381	510	1,324	7,946	2,222	35,314
Punjab		NA	NA	NA	NA	NA	NA	NA	NA	NA
Rajasthan (as on 31-3-73)		35,515	—	—[1]	27,791	722	9,338	23,043	20,278	1,16,687
Sikkim		NA[2]	NA	NA	NA	NA	NA	NA	NA	NA
Tamil Nadu		5,81,137	3,597	2,830	50,073	9,790	10,061	19,203	12,865	1,66,556
Tripura (as on 31-3-72)		430	2	1,233	210	298	248	1,668	406	4,495
Uttar Pradesh		86,526	1,210	7,962	37,258	5,074	7,652	28,673	37,033	2,11,388
West Bengal (as on 31-3-73)	..	36,398	350	1,900	83,388	6,580	9,060	36,453	16,160	1,90,279
Andaman and Nicobar Islands	..	446	NA	125	134	43	55	344	180	1,327
Chandigarh	..	NA	NA	NA	NA	NA	NA	NA	NA	NA
Delhi	..	1,16,138	11,524	—[1]	46,407	4,449	5,662	11,691	NA	19,771
Dadra and Nagar Haveli	..	125	NA	18	140	2	—[1]	17	8	310
Goa, Daman and Diu	..	8,386	69	—[1]	7,940	1,101	907	6,355	333	24,791
Pondicherry	..	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL[4]	..	7,40,259	63,366	73,164	5,54,629	82,518	92,464	3,08,306	1,93,376	21,08,072

[1] Included in cars. [2] Included in two-wheelers. [3] Only during the quarter period. [4] Excluding Sikkim and other states from which figures are not available. NA—Not Available.

Pradesh, Maharashtra, Orissa, Uttar Pradesh and West Bengal and the union territory of Goa, Daman and Diu have set up inland water transport organisations to formulate and implement schemes.

CIWTC

The Central Inland Water Transport Corporation, set up in 1967 at Calcutta, operates the river services between Calcutta and Assam *via* Bangladesh and between India and Bangladesh. Its other activities include ship-building and ship-repairing; stevedoring and clearing agency at Calcutta; dredging on the Bhagirathi river and maintenance of dredgers of the Coal Board on the Ajoy and Damodar rivers.

SHIPPING

India is the second largest ship-owning country in Asia and ranks seventeenth in the world. Indian ships operate on most of the sea routes of the world.

The shipping tonnage on 1 April 1975 was 38.29 lakh grt (with another 18.00 lakh grt approximately on order) as against 3.72 lakh grt on 1 April 1951. Of this, the central government undertakings owned 9.96 lakh grt, *i.e.*, 49.5 per cent. The number of ships was 302 as against 94 on 1 April 1951. During 1974, nineteen vessels of 5.12 lakh grt were added to the fleet. They included the MT SAMRAT ASHOKA and the MT ABUL KALAM AZAD, the largest and the second largest. The Fifth Plan envisages a target of 96 lakh grt including 10 lakh grt on order.

Shipping Bodies

The National Shipping Board advises the government on shipping. The Shipping Co-ordination Committee in the Union Ministry of Shipping and Transport seeks to bring about better liaison between the government and the shipping companies to ensure maximum utilisation of the available capacity. The All India Shipping Council is concerned with negotiations on freight and shipping problems at shipping conferences and with shipping companies.

The Indian National Shipowners' Association, which is also represented on most of the government bodies on shipping, promotes the interests of national shipping, ship-building and allied industries.

Shipping Companies

There are at present 37 shipping companies in the country. Of these, two companies, namely, the Shipping Corporation of India Ltd. (SCI) and the Mogul Line Ltd. are in the public sector and the rest in the private sector.

The SCI, which is one of the biggest shipping lines in the world, has a fleet of 119 vessels with 19.04 lakh grt. It operates on all the important maritime routes. It also operates overseas tanker services under charter, besides coastal services. During 1974-75, the SCI had a record freight earning of Rs 24 crores. From the level of of 2.00 lakh dwt of ships in 1961 its, tonnage crossed the 10.00 lakh dwt mark in 1970, 20.00 lakh dwt in 1974 and 30.00 lakh dwt in 1975. The SCI has also started a joint shipping venture with Arya-National Shipping lines of Iran to operate between India and Iran as well as some ports of the Far East region.

The Mogul Line Ltd. mainly carries Haj pilgrims from Bombay to Jeddah (Saudi Arabia) and back. It also operates two passenger vessels on the Konkan coast. Its fleet consists of ten vessels with a total grt of 91,680 tonnes.

Among the major private sector shipping companies which

own one lakh or more grt are the Scindia Steam Navigation Company Ltd. (4.94 lakh grt), Great Eastern Shipping Company Ltd. (3.18 lakh grt), Indian Steamship Company Ltd. (1.54 lakh grt) and South India Shipping Corporation Ltd. (1.22 lakh grt).

The cargo carried by Indian ships in the country's overseas trade was 1.4 crore tonnes in 1973-74 amounting to 22 per cent of the country's trade.

In January 1975, a protocol on resumption of shipping services with Pakistan was signed in New Delhi, according to which trade will be carried by the ships of both the countries on 50:50 basis.

Training Institutions

There are six training establishments for merchant navy officers and ratings. T.S. 'Rajendra' at Bombay imparts pre-sea training to navigation cadets. The Directorate of Marine Engineering Training, Calcutta, trains engineering cadets. The Lal Bahadur Shastri Nautical and Engineering College, Bombay, conducts post-sea instructional courses for navigation and engineering cadets. T.S. 'Bhadra', T.S. 'Mekhala' and T.S. 'Naulakhi' provide pre-sea training courses for deck and engine room ratings and bhandari cooks.

Ship-Building[1]

India has three major ship-building yards, the Hindustan Shipyard at Vishakhapatnam, Garden Reach Workshops at Calcutta and Mazagaon Dock at Bombay. A fourth shipyard is under construction at Cochin. All the shipyards are in the public sector.

Hindustan Shipyard

The Hindustan Shipyard has built 68 ships since 1947. Its present production capacity is 2.5 ships of 21,500 dwt each year. Under an integrated development programme, the production capacity of the yard is being raised to 6 ships aggregating 80,000 dwt annually. Apart from a dry dock, which is in operation since 1971, the construction of a wet dock was started in 1972. On completion, it will enable the shipyard to undertake above water repairs of ships and provide increased fitting-out facilities.

Garden Reach Workshops

The Garden Reach Workshops build tugs, barges, dredges and coasters. They have now a capacity to construct ocean-going merchant ships of 15,000-26,000 dwt every year.

Mazagaon Dock

The Mazagaon Dock, which primarily constructs ships for the Navy, is also capable of building cargo ships, passenger ships, cargo-cum-passenger ships and dredgers. Its subsidiary, the Goa Shipyard Ltd., builds launches and tugs and also undertakes ship-repairing.

Cochin Shipyard

The shipyard at Cochin, provides for a dock for building ships of 85,000 dwt and another dock for repair of ships up to 1,00,000 dwt. Under an agreement, a Scottish firm will collaborate in buildings first series of five ships of 75,000 dwt each.

Marine Design Organisation

To encourage marine design, which is at present purchased from abroad, a central marine design and research organisation is to be set up during the Fifth Plan at a cost of Rs 100 crores.

PORTS

India has ten major and more than 160 intermediate and minor ports scattered along her 6,100 km long coastline.

[1]Prime Minister laid the keel of the first ship to be built at Cochin shipyard, a 75,000 dwt bulk carrier, for the Shipping Corporation of India, on 11 February 1976.

Major Ports

The major ports are at Bombay, Calcutta, Cochin, Kandla, Madras, Mangalore, Marmagoa, Paradip, Tuticorin and Vishakhapatnam.

Among the major ports Bombay is the biggest. About a quarter of the foreign trade of India passes through Bombay. Calcutta is the largest terminal port in South Asia. It commands the largest and the richest hinterland. Cochin is one of the finest natural harbours in the East. Kandla has been developed as a major port to relieve the pressure on Bombay. A free trade zone was created at Kandla in 1965. Madras is a man-made port. Marmagoa (Goa) enjoys the second position in total traffic tonnage. Paradip (Orissa) is primarily for the export of minerals, specially iron ore. Vishakhapatnam is the only land-locked and protected port. Mangalore on the west coast and Tuticorin on the east coast were declared major ports in 1974. All the major ports, except Mangalore and Tuticorin, are administered by statutory port trust boards.

The traffic handled by the major ports, excluding Mangalore and Tuticorin, during 1974-75 was 5.8 crore tonnes.

Intermediate and Minor Ports

The Indian coastline is served, apart from major ports, by more than 160 intermediate and minor ports which handle coastal and overseas traffic. The responsibility for the development of such ports vests in the state governments concerned. The central government gives loans and provides technical advice to state governments.

The Fifth Plan provides Rs 10 crores for the development of intermediate and minor ports. In addition, Rs 12 crores have been set aside for the development of ports in Andaman and Nicobar Islands and Lakshadweep.

National Harbour Board

The National Harbour Board was set up in 1950 to advise the central and state governments on the management and development of ports, particularly minor ports. It consists of representatives of the maritime states, the central ministries concerned, port authorities and non-official members representing Parliament, shipping, trade, industry and harbour.

Navigational Aids

The navigational aids have been categorised into general and local. While the central government looks after the general navigational aids, the states, port trusts and other agencies are responsible for the local aids. However, under the Indian Light House Act, 1927, the central government exercises general control over all aids through the Department of Lighthouses and Lightships. The Department maintains various navigational aids along the coast of India, besides launches and VHF wireless sets. In 1973-74, there were, among others, 140 lighthouses, 27 lightbuoys, 12 fog signals, 7 radio beacons, eight Decca navigator chain stations and 2 light vessels. During the Fourth Plan period, 13 lighthouses, 1 lightship and 6 deep sea-buoys were constructed. In the Fifth Plan, Rs 12 crores have been provided both for spill-over and new schemes.

CIVIL AVIATION

On 31 December 1974, there were 654 aircraft with current certificates of registration and 246 with current certificates of air-worthiness. During 1974, Indian aircraft flew, on scheduled services, 5.39 crore kilometres, carried 28.4 lakh of passengers and 52,232 tonnes of cargo and mail as against 6.39 crore kilometres, 33.7 lakh passengers

and 62,314 tonnes of cargo and mail respectively in 1973. The decrease in traffic was due to the strike in Air India and curtailed services of Indian Airlines.

Directorate of Civil Aviation

The Civil Aviation Directorate operates the civil airports in India except the international airports. It is also responsible for the air navigation services which include air traffic control and services for safety and regularity of aircraft operations.

IAAI

The International Airports Authority of India (IAAI) was set up in 1972 for the operation, management, planning and development of the four international airports. The Authority took over the international airports on 1 April 1972.

Airports

There are four international airports and 84 other aerodromes in the country. The international airports are: Bombay (Santa Cruz), Calcutta (Dum Dum), Delhi (Palam) and Madras (Meenamakkam). The Aerodromes maintained by the Civil Aviation department as on 31 December 1974 were:

Major Aerodromes: Agartala, Ahmadabad, Amritsar, Begumpet, Delhi (Safdarjung), Gauhati, Jaipur, Lucknow, Nagpur, Patna, Tiruchchirappalli, Varanasi (Banaras).

Intermediate Aerodromes: Aurangabad, Behala, Belgaum, Bhavnagar, Bhuntar (Kulu), Bhopal, Bhubaneswar, Bhuj, Bombay (Juhu), Coimbatore, Gaya, Indore, Junagadh (Keshod), Kailashahar, Kamalpur, Kandla, Khajuraho, Khowai, Kota, Kumbhirgram, Madurai, Mangalore (Bajpe), Mohanbari, Muzaffarpur (Rewaghat), Nadirgul (Gliderdrome, Hyderabad), North Lakhimpur (Lilabari), Panagarh, Pantnagar (Phoolbagh), Porbandar, Port Blair, Raipur, Rajkot, Ranchi, Tirupati, Trivandrum, Tulihal (Imphal), Udaipur, Vadodara, Vijayawada, Vishakhapatnam,

Minor Aerodromes: Akola, Balurghat, Bilaspur, Chakulia, Cooch Behar, Cuddapah, Donakonda, Hadapsar (Gliderdrome, Pune), Hassan, Jabalpur, Jhansi, Jharsuguda, Jogbani, Kanpur (Civil), Khandwa, Kolhapur, Lalitpur, Malda, Mysore, Palanpur (Deesa), Panna, Passighat, Rajahmundry, Ramnad, Raxaul, Rupsi, Satna, Shella, Sholapur, Thanjavur, Vellore, Warangal, Barapani (Shillong).

Air Services

The scheduled air services are run by two public sector corporations, Indian Airlines and Air-India, both of which were formed in 1953. The Indian Airlines provides air services within the country, linking up most of the principal industrial and tourist centres, and also to neighbouring countries, such, as Bangladesh, Burma, Nepal and Sri Lanka. During 1974, it flew 6,25,675 passengers and covered over 19.3 crore tonne kilometres. On 31 March 1975, its operational fleet consisted of 10 Boeing-737s, 9 Caravelles (including three on lease), 9 Viscounts, 9 Fokkers and 15 HS-748s.

Air-India provides an all-jet service reaching out to 28 countries. During 1974-75, it carried 5,02,941 passengers and flew about 41 crore tonne kilometres. Its fleet consisted of 9 Boeing-707s and 4 Boeing-747s (Jumbo Jets).

Air Transport Agreement

India has air transport agreements with Afghanistan, Australia, Belgium, Burma, Czechoslovakia, Egypt, Ethiopia, Federal Republic of Germany, Fiji, France, Hungary, Indonesia, Iran, Iraq, Italy, Japan, Kenya, Kuwait, Lebanon, Malaysia, Mauritius, Nepal, Nether-

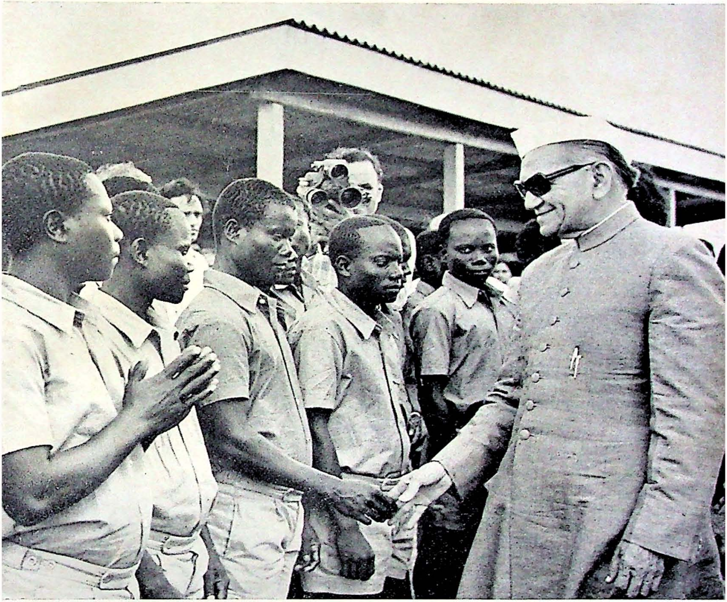
Prime Minister Indira Gandhi addressing a mass rally at Lal Bahadur Stadium, Hyderabad in November

DANCES OF INDIA

Bharata Natyam, Odissi, Kathak, Kathakali, Kuchipudi and Manipuri

INDIAN BIRDS

Indian Pitta
Blackheaded Oriole
Western Tragopan
Monal Pheasant



The President visited the Andaman and Nicobar Islands in November. Shri Ahmed meeting a group of tribal people

One hundred and one Mizo rebels surrendering their arms at Aizawl in November

lands, Pakistan, Philippines, Quatar, Saudi Arabia, Singapore, Sri Lanka, Sweden, Switzerland, Tanzania, Thailand, Uganda, United Arab Emirates, UK, USA and USSR.

Flying Clubs and Gliding Centres

There are 25 subsidised flying clubs with headquarters at Amritsar, Banasthali, Bangalore, Baroda, Bhubaneswar, Bombay, Calcutta, Coimbatore, Gauhati, Hissar, Hyderabad, Indore (with a branch at Bhopal), Jaipur, Jamshedpur, Jullundur Cantt., Karnal, Lucknow (with branches at Kanpur and Varanasi), Ludhiana, Madras, Nagpur, New Delhi, Patiala, Patna, Raipur and Trivandrum.

There is one Departmental gliding centre at Pune and 13 subsidised gliding clubs at Agra, Ahmadabad, Amritsar, Hissar, Jaipur, Jullundur, Kanpur, Nasik, New Delhi, Patiala, Patna, Pilani and Raipur.

Training Centres

The Civil Aviation Training Centre at Allahabad comprising an Aerodrome school and a communications school trains air traffic controllers, radio operators and technicians. Ground training to pilot trainees is also provided. The Central Flying Training School at Nadirgul, Hyderabad, imparts advanced training to candidates from the flying clubs for the grant of commercial pilot licences.

TOURISM

In 1974, 4,23,161 tourists visited India as compared to 4,09,895 in 1973, an increase of 3.2 per cent. The foreign exchange earnings from tourism amounted to Rs 69.7 crores in 1974 as against Rs 67.5 crores in the preceding year. In all 4,65,265 tourists visited India in 1975; foreign exchange earnings were estimated at about Rs. 104 crores at current prices.

India's potential for tourism is as vast as it is varied. While the infra-structure at home is being strengthened, promotional activities are undertaken abroad to attract more tourists. A sum of Rs 78 crores has been proposed for developing tourism in the draft Fifth Plan as against Rs 25 crores in the Fourth Plan.

Tourism Bodies

The National Tourism Board, set up in 1972, advises on tourism policy and directions in which tourism should be developed. The Tourist Development Council co-ordinates tourism plans of the central and state governments. The Department of Tourism of the Union Ministry of Tourism and Civil Aviation has both promotional and organisational functions and works in close co-operation with the India Tourism Development Corporation. Several states and union territories have also set up tourism departments and offices.

The Department of Tourism has a chain of regional offices at home and abroad. Regional offices are functioning in Bombay, Calcutta, Delhi and Madras with sub-offices at Agra, Aurangabad, Cochin, Jaipur, Jammu, Khajuraho and Varanasi. These offices work in close collaboration with state governments, travel agents, hoteliers and carriers. Abroad, India has tourist offices in New York, San Francisco, Chicago, Rio de Janeiro, Toronto, London, Sydney, Paris, Tokyo, Frankfurt, Geneva, Brussels, Stockholm, Milan, Singapore and Vienna. In addition, tourist promotion centres are based at Boston, Dallas, Los Angeles, Miami, Seattle and Washington.

The tourist offices at Brussels, Frankfurt, Geneva, London, Milan, Paris and Stockholm in Europe, Chicago, New York and San Francisco in USA and Toronto in Canada are functioning under a scheme of close collaboration between the Department of Tourism and Air India for promotion of tourist traffic from these regions. The scheme is to be extended to East Asia and Australia also.

Accommodation and Other Facilities

There are at present 214 hotels, with 14,070 rooms, on the approved list of the Department of Tourism. Youth hostels, forest lodges, reception centres, tourist bungalows and camping sites provide supplementary accommodation to low-budget tourists. Rest houses are also being constructed at 5 wild life sanctuaries and national parks. The Department has provided 22 mini coaches fitted with public address system to different state governments.

At present, there are 136 approved tourist car operators spread over 28 tourist centres and a number of approved tourist shops at important tourist centres. Apart from this, there are 112 officially registered travel agencies in the country and an increasing number of trained and approved travel guides.

Incentives for Tourists

To promote tourist traffic, regulations relating to police registration, currency, exchange control, customs, prohibition and visas have been liberalised. Certain other simplification of formalities is under way. The validity of landing permits has been increased from 21 to 28 days. Tourists from many countries can now come to India without a visa. Concessional tickets are issued by the railways for round-trip journeys and circular tours. Special concessions are given to students and pilgrims and for travel to hill stations during summer months. "Travel As You Like" railway tickets, valid for 21 days, are also available to foreign tourists.

India Tourism Development Corporation

The India Tourism Development Corporation, set up in 1966, is the only multi-unit undertaking for the development of tourism in the country. It looks after the construction and management of hotels, motels and travellers' lodges, provision of transport facilities for tourists, production of tourist publicity and promotional material, provision of entertainment and management of 'duty free' shops at international airports.

Presently, the Corporation has under its management 13 hotels—six in Delhi, and one each at Aurangabad, Bangalore, Kovalam, Khajuraho, Mysore, Udaipur and Varanasi. It also arranges sound and light shows at Red Fort, Delhi, Sabarmati Ashram, Ahmadabad, and Shalimar Gardens, Srinagar. In addition it runs 2 motels at Jammu and Hassan (Karnataka) as well as tourist cottages at Kovalam and Mahabalipuram.

METEOROLOGY

Meteorological and weather services are provided by the India Meteorological Department which is one of the oldest scientific institutions in the country. It has its headquarters as well as a regional office at New Delhi. The other regional offices are at Bombay, Calcutta, Madras and Nagpur. The Calcutta unit compiles and publishes the 'Indian Nautical Almanac' and the 'Rashtriya Panchang' in Bengali, English, Gujarati, Kannada, Malayalam, Marathi, Oriya, Sanskrit, Tamil, Telugu and Urdu. Meteorological centres have

been set up at Ahmadabad, Bangalore, Bhubaneswar, Gauhati, Hyderabad, Jaipur, Lucknow, Srinagar and Trivandrum. The Trivandrum centre maintains liaison with the Thumba Equatorial Rocket Launching Station regarding the meteorological sounding of the upper atmosphere with rockets.

The Department issues 'warnings' against heavy rainfall, strong winds and cyclonic weather for the general public and a number of private and public organisations including aviation, defence services, shipping, ports and fishing craft, mountaineering expeditions and agriculturists. Flood meteorological offices have been working at Ahmadabad, Bhubaneswar, Delhi, Gauhati, Lucknow and Patna to give meteorological support to the Flood Forecasting Organisation set up by the Central Water Commission.

There are separate directorates of the Department to deal with agricultural meteorology, meteorological training, Indian Ocean and Southern Hemisphere Analysis, instruments, hydro-meteorology, aviation services, Northern Hemisphere analysis, radio-meteorology, satellite meteorology and meteorological telecommunications.

Cyclone Forecasts

Cyclone warnings to ports and ships are issued on the basis of data by weather satellites through automatic picture taking stations at Bombay, Calcutta, Madras, New Delhi and Pune. For improving the cyclone 'warnings', the Meteorological Department has established cyclone warning radar stations at Bombay, Calcutta, Madras, Paradip and Vishakhapatnam. Three more stations at Masulipatnam, Karaikal and Goa have been planned for vulnerable areas of the Indian coastline. A cyclone warning and research centre has been established at Madras to investigate problems exclusively relating to tropical cyclones.

Tourists' Meteorological Services

Tourism departments at the centre and the states have access to the records of the Meteorological Department for providing information to tourists regarding the best period to visit India in their respective fields of interest.

Tourists' meteorological offices are being set up in various parts of the country to issue weather forecasts to the tourists of each resort. Two such centres have been set up at Kovalam and Mahabalipuram with one more coming up at Gulmarg.

Exchange of Data

Meteorological data are exchanged with many countries through high speed telecommunication facilities. As part of India's co-operation in the World Weather Watch, the Regional Meteorogical Centre and the Regional Telecommunication Hub have been established at New Delhi. An area forecast centre has also been set up in New Delhi to exchange data with international airports.

21 COMMUNICATIONS

The history of modern postal system in India may be traced back to 1837 when postal services were thrown open to the public. The first postage stamp was issued in Karachi in 1852 though it was valid only in Sind. The postal department was set up in 1854 when about 700 post offices were already functioning in the country. The money order system was introduced in 1880. Five years later, postal savings bank scheme was put in operation. The railway mail service was started in 1907 and the air mail service in 1911.

Remarkable progress in communication services has been made between 1951 and 1975. During the period the number of post offices has increased by more than three times; telegraph offices nearly doubled and telephones increased more than nine times. The subscriber trunk dialling service, introduced in 1960, is now in operation between 95 pairs of cities. The overseas communication system connects India with almost all countries of the world.

The Posts and Telegraph Board which provides the postal and telecom-munication services is, next to the railways, the largest employer in the country. The number of persons (including extra-departmental and industrial workers) employed by the Board as on 31 March 1974 was 6.29 lakhs and the capital outlay of the Board (outside the revenue account) was Rs 742.27 crores.

For operational purposes, the country is divided into 15 Telecom Circles and 16 Postal Circles, 7 P & T Civil Circles, 1 P & T Electrical Circle and 16 telephone districts of Ahmadabad, Bangalore, Bombay, Calcutta, Coimbatore, Delhi, Ernakulam, Hyderabad, Indore, Jaipur, Kanpur, Lucknow, Madras, Nagpur, Patna and Pune. Apart from these, there are units for specific purposes. The Ministry of Communications, through the Department of Posts and Telegraphs, discharges also certain agency functions like collecting Broadcast Receiver Licence fee, running post office savings banks, issuing national savings certificates and postal life insurance policies and selling units of the Unit Trust of India. In some of the metropolitan cities private car owners can also pay their vehicle tax through specified post offices.

POSTAL SERVICES

The number of post offices on 1 March 1975 was 1,16,991 including 1,05,500 in rural areas. On an average, each post office served 4,686 persons and covered an area of 27.37 sq km as against 10,026 persons and 91.12 sq km respectively in 1951. During the Fifth Plan, 31,000 new post offices are to be opened. The number of letter boxes was 2,41,238 including those at places other than post office premises. Delivery of mail was being made daily to 3,88,899 villages in 1974 as compared to 3,88,530 villages in 1973. The number of postal articles handled during 1973-74 was 699.3 crores including 10.06 crore inland money orders of the value of Rs 738.6 crores. The postal revenue was Rs 134.24 crores. Statistically, this worked out to an average of 12 articles and a revenue of Rs 2.30 per head of the population per annum.

Conveyance of Mail

Mail is carried both by surface and air. For surface mail, various modes of conveyance are used. The total surface route length covered in 1973-74 was 7.9 lakh km, of which 11 per cent was by rail, 33 per

cent by motor services, 45 per cent by runners and carriers and 11 per cent by various other means such as steamers, mail carts, camels, horses and cycles.

An inland night air mail service links up the principal cities of India. Under the 'all-up scheme', all inland letters, letter-cards, post-cards and money orders are normally carried by air without surcharge. A new scheme called Quick Mail Service was introduced in 1975 taking advantage of the late-night/pre-dawn services of the Indian Airlines. This covers all state capitals and some important cities and towns and ensures delivery of letters the very next day. The total weight of air mail carried in 1973-74 was 78 lakh kg.

India has also air mail and air parcel services with over a hundred countries of the world.

PIN Code

To modernise the handling of the growing volume of mail, the Postal Index Number (PIN) code was introduced in 1972. The code has six digits which help to identify and locate every departmental delivery office. It provides a built-in routing information for postal sorting. The first digit indicates the region, the second digit the sub-region and the first three digits, taken together, the central sorting district. The last three digits indicate a particular delivery post office in the area served by the sorting district.

Table 21.1 gives important data relating to postal services in the country.

TABLE 21.1
POSTAL STATISTICS

	1950-51	1960-61	1965-66	1972-73	1973-74
Number of post offices					
Urban	5,284	7,326	8,913	11,008	11,453
Rural	30,810	69,513	88,023	1,04,643	1.05,287
TOTAL	36,094	76,839	96,936	1,15,651	1,16,740
Postal articles (crores)	232.10	410.55	655.55	678.08	699.30
Regd. articles (crores)	7.65	11.60	16.28	19.00	19.72
Insured articles (lakhs)	37.23	41.00	55.00	69.00	70.53
Money orders (crores)	5.10	7.65	9.15	9.98	10.06
Value of money orders (Rs crores)	195.00	334.25	477.43	697.60	738.60
Postal revenue (Rs crores)	21.03	40.78	66.00	118.25	134.24

Post Offices in Backward Areas

Extension of postal facilities to backward and hilly areas has been further liberalised since 1971. New post offices are opened in 'very backward areas' on the criterion that these post offices earn an estimated revenue of 15 per cent of their cost. In hilly areas, it is put at 10 per cent of the cost. On 1 April 1974, the number of such post offices was 12,910.

Post Offices Savings Bank

The number of depositors of the post office savings bank was 2.21 crores as on 31 December 1975 involving a total amount of Rs 1,257 crores. Savings bank facilities on 31 March 1974 were available at 536 head post offices, 20,651 sub post offices and 94,602 branch post offices. The expansion of post office savings bank business since 1961 is shown in Table 21.2.

Various measures were taken in 1973-74 to attract more deposits. From 1 June 1974 Instant Counter Service facilities were extended to all the Head Post Offices in the country. This is similar to the teller system in commercial banks. A new scheme called Savings Bank Prize Incentive Scheme, the first draw of which was held on 31 July 1974, could mobilise an additional deposit of Rs 18 crores.

(As on 31 March)

TABLE 21.2
EXPANSION OF POST OFFICE SAVINGS BANK

Year	Savings bank		Cumulative time deposits		Savings certificates
	No. of depositors (lakhs)	Balance (Rs crores)	No. of depositors (lakhs)	Balance (Rs crores)	Balance (Rs crores)
1961	92	431.40	3.98	2.64	377.20
1970	197	890.00	51.18	98.31	921.89
1971	206	974.00	51.30	116.54	888.49
1972	218	1,025.00	51.65	133.73	883.50
1973	231	1,119.00	49.99	144.19	949.97
1974	250	1,264.00	47.08[1]	156.78[1]	1,021.64

[1]Provisional

Postal Life Insurance

The number of postal life insurance policies in force as on 31 March 1974 was 3,12,067 and the sum assured was of the value of Rs 103.9 crores. In 1973-74 new policies of the value of Rs 13.98 crores were issued as against Rs 9.81 crores in 1972-73. It showed an increase of 42.5 per cent in new business. In 1974-75 there 36,440 proposals of the value of Rs 17.98 crores.

Commemorative Stamps

The Indian Posts and Telegraphs Department has been issuing Commemorative stamps since 1931, on eminent personalities and important events. Indian life, culture and civilization are portrayed through the release of such stamps which are becoming increasingly popular both at home and abroad. In 1975, among the 43 such commemorative stamps issued, 4 were in the 'birds of India' series and 6 in the 'dances of India' series. On 16 Feb. 1975 a stamp to commemorate the International Women's Year was also issued.

At present, 22 philatelic bureaux and 27 philatelic centres are functioning in different parts of the country. Besides, agents have been appointed in the UK and some other countries of Europe, USA, Japan and Australia for sale of Indian stamps in these regions.

TELEGRAPH SERVICES

Indian telegraphs is one of the oldest government-owned public utility organisations in the world. The first government telegraph line was opened in 1851 between Calcutta and Diamond Harbour.

There were 17,137 telegraph offices (excluding postal receiving offices and licensed telegraph offices) on 31 March 1974. Over 6.5 crore telegrams were booked during 1973-74, earning a revenue of Rs 40.6 crores. The corresponding figures for 1950-51 were: telegraph offices—8,205, telegrams—2.79 crores and revenue—Rs 5.9 crores. About 7,000 new telegraph offices are proposed to be opened during the Fifth Plan period. Telegraph services are being progressively extended to rural areas in the country. As on 31 March 1975 there were 12,380 telegraph offices in rural areas.

Since 1949, a number of telegraph offices are accepting telegrams in Hindi and other principal Indian languages provided they are written in Devanagari script. On 31 December 1974, this facility was available at 6,705 telegraph offices. Over 15,28,300 telegrams were sent in Devanagari script in 1973-74 as against 12,73,200 in 1972-73.

The phonogram service for sending and receiving telegrams by telephone was available at 2,466 stations up to 31 March 1974. Over 96.6 lakh messages were booked and over 21.7 lakh messages delivered on telephone during 1973-74.

Teleprinters

The number of teleprinters in use on 31 December 1973 was 21,033, including 876 teleprinters with Devanagari key-board, as against 20,358 and 800 respectively at the end of 1972.

The Hindustan Teleprinters Ltd., a public sector undertaking, was established at Madras in 1960 to manufacture teleprinters. Over 6,000 units of teleprinters and spares were produced in 1973-74. It has also started production of electrical typewriters.

Telex Service

The national telex service was opened in 1963. The first Devanagari telex was inaugurated in New Delhi in 1969. With the commissioning of teleprinter exchanges at important cities, printed messages can be sent and received directly from one subscriber to another in any part of the country. Telex service was available between 58 cities. These cities had an installed capacity of 13,830 telex connections on 31 March 1975.

Facsimile Service

Facsimile service was introduced in 1969 for the first time in the country at Madras, facilitating simultaneous printing of a newspaper at Madras and Coimbatore. It was extended to Bangalore in 1970.

TELEPHONE SERVICES

India had a 50-line telephone exchange in Calcutta as early as 1881, five years after the telephone was invented by Graham Bell. The first telephone exchange with automatic lines was installed at Simla in 1913. The next development came in 1930 when the first carrier system was installed between Delhi and Agra. During the second world war, telecommunication services were strengthened with high grade trunk lines extending to over 12,800 km. During this period, the Government took over the licensed private telephone companies. At the time of Independence, there were 321 exchanges and 86,000 telephones It was after 1951, however, that telephone services made rapid progress. The number of telephone exchanges has increased by more than nine times and the number of telephones by more than ten times since 1951 as shown in Table 20.3. In early 1976 there were over 4,900 exchanges with a total capacity of about 17 lakh lines having over 18 lakh telephone sets.

A countrywide programme of installing telephone exchange lines was taken up on 10 March 1976 to mark the centenary of the invention of the telephone by Alexander Graham Bell. Under this programme about 12,500 lines will be added to various exchanges in the country.

TABLE 21.3 TELEPHONE STATISTICS

(as on 1 April)

	1951	1961	1971	1974	1975
No. of telephones exchanges	540	1,374	3,967	4,704	4,883
No. of telephones (in lakhs)	1.68	4.63	13.00	16.29	17.75

The first computer-controlled electronic telephone exchange is to be set up for commercial trial at Rajauri Garden in Delhi by early 1977.

The number of long distance public call offices was 5,376 on 31 March 1975. The number of trunk calls increased from 71 lakhs in 1950-51 to 17 crores in 1974-75. The telephone revenue during the same period increased from Rs 9 crores to Rs 230 crores.

STD Service

Direct trunk dialling by subscribers (STD), first introduced between Kanpur and Lucknow in 1960, is now in operation between 95 pairs

of cities. 33 of these STD routes are working via inter-switching through six automatic exchanges. In addition, there are 14 cities among which STD is provided on a part time basis during concessional tariff periods.

'On Demand' Trunk Service

The 'On Demand' trunk service was introduced for the first time on Bombay-Bangalore route in 1971. Since then the service has been extended to 111 trunk routes in the country.

Ship-to shore Service

Ship-to-shore service is available at Bombay, Calcutta and Madras, under which subscribers can have telephonic contacts with ships at sea within 750 km.

OYT Scheme

The 'own your telephone' scheme (OYT), introduced in 1949, now covers all the telephone systems in the country. About 3,04,741 phones were provided under this scheme which yielded a revenue of Rs 88.74 crores till 15 April 1975.

Telephone Manufacture

The Indian Telephone Industries Ltd. (ITI), Bangalore, a pubic sector undertaking, was set up in 1948 to manufacture telecommunication equipment. It has got factories now at Bangalore, Naini (two units), and Srinagar. Another unit is being set up at Rae Bareli.

During 1973-74, the ITI manufactued 2,55,905 telephone instruments besides other equipment. The total sales of ITI during the period amounted to Rs 44.95 crores including exports worth Rs 43.76 lakhs. Among the import countries were Australia, Burma, Belgium, East Africa, Greece, Indonesia, Jordan, Malaysia, Sri Lanka, UK and Zambia.

OVERSEAS COMMUNICATIONS

India's external telecommunication services are operated by the Overseas Communications Service (OCS) with its headquarters at Bombay.

The OCS operates through four international gateway centres located at Bombay, Calcutta, Madras and New Delhi and provides overseas telegraph, telephone. telex, radio-photo and leased telegraph channel services. It also arranges broadcast transmission and reception facilities for the government and news agencies.

With the commissioning of India's first satellite earth station, Vikram, at Arvi near Pune in 1971, the OCS is also operating through INTELSAT satellite positioned over the Indian Ocean. The second satellite earth station is being set up near Dehra Dun.

Through a network of satellite and high frequency radio circuits, the OCS provides telegraph services to all countries, telephone services to 182 countries, telex services to 164 countries and radio-photo to 54 countries. A Scheme for a wide-band submarine telephone cable link between India and the Malaysian peninsula known as Indian Ocean Commonwealth Cable Project is under consideration.

Leased Teleprinter Channels

The Overseas Communication Service leases teleprinter channels for the exclusive use of private subscribers. Several international airline companies, government dapartments, foreign embassies and international business houses are using this facility. At present, there are 56 leased private wire teleprinter channels in operation, 36 being handled *via* INTELSAT.

Programme Transmissions

Facilities are provided on the overseas telephone system for the transmission and reception of programmes consisting of voicecasts

by correspondents of broadcasting organisations for use on their broadcast networks.

Press Broadcasts

The Overseas Communication Service provides multi-address teleprinter news broadcast transmissions, on behalf of the Ministry of External Affairs, simultaneously to 66 Indian Consular posts around the world. Point-to-point telegraph news transmissions are also provided to a national news agency from Bombay.

The OCS also carries out reception of foreign radio-telegraph press broadcasts on behalf of news agencies.

WIRELESS PLANNING AND CO-ORDINATION

The Wireless Planning and Co-ordination Wing of the Union Ministry of Communications is responsible for all matters concerning the International Telecommunications Union, Geneva, a specialised UN agency. It also functions as the radio regulatory authority for all radio usages in the country and in that capacity assigns radio frequencies and issues operating licences to all official and non-official wireless users. Cases of radio interference are investigated and resolved through national and, if necessary, through international co-ordination. Problems about frequency usages for satellite communication and other space systems are also co-ordinated both at national and international levels.

Monitoring

The Monitoring Organisation of the Communications Ministry has a network of monitoring stations set up for frequency management and implementation of radio regulations. Twelve such stations are functioning at Ahmadabad, Ajmer, Bombay, Calcutta, Delhi, Gorakhpur, Hyderabad, Madras, Nagpur, Ranchi, Shillong and Srinagar. In addition field monitoring stations have also been established at Darjeeling, Jullundur and Mangalore for effective links in very High Frequency bands.

Three units have been set up at Bombay, Calcutta and Delhi for carrying out region-wise inspection of licensed and authorised stations to ensure that they conform to the terms and conditions of the licences. One radio noise survey unit has also been established at Delhi to investigate the quantum of man-made radio noise responsible for interference with radio communications and suggest counter measures.

22 LABOUR

In 1971, the working population of India was about 18.04 crores or about 32.92 per cent of the total population of India. Of the working population only 10 per cent was in the organised sector and the rest in the traditional sector. Cultivators and agricultural labourers formed the bulk of the traditional workers—43.34 per cent and 26.33 per cent respectively. Table 22.1 gives the distribution of working population according to activity and sex.

However, reliable data are available only for the organised sector of India's economy. Most of the acts passed by the government for the welfare of workers relate to workers in this sector. A number of social security schemes are also in operation for these workers. These include factory acts, wages acts, and social security schemes like employees' state insurance, employees' provident funds, death relief and family pension for workers and their families. Some acts and rules have also been framed for the unorganised sector. The Minimum Wages Act, 1948 is also applicable to many categories of workers in this sector.

In the organised sector of India's economy, the largest number of workers are employed in factories[1]. In 1972, the estimated average daily employment in working factories, for which figures were available, stood at 53.8 lakhs (provisional).

According to 1972 daily employment figures, Maharashtra had the largest number of factory workers (10,60,000) followed by West Bengal (8,61,000), Tamil Nadu (4,82,000) and Gujarat (4,78,000).

The average daily number of workers employed in all mines in 1972 was 6,59,000 (2,65,000 underground, 1,99,000 open-cast working and 1,94,000 surface). The corresponding figures for coal mines covered by the Mines Act, 1952, for the year 1972 was 4,10,000 (2,37,000 underground, 4,9,000 open-cast working and 1,25,000 surface).

WORKING CONDITIONS

Working conditions in factories are regulated by the Factories Act, 1948 which prescribes a 48-hour week for adult workers and forbids the employment of children under 14 in any factory. Minimum standards of lighting, ventilation, safety, health and welfare services which the employers must provide in their factories have also been laid down. Factories with more than 250 employees have to provide canteens for their workers.

WAGES AND EARNINGS

Table 22.2 gives the average per capita annual earnings of factory workers drawing less than Rs 400 per month in different states and union territories.

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[1] Under the Factories Act, 1948, a factory is defined as any premises including the precincts thereof where 10 or more workers are working or were working on any day of the preceding twelve months and any part of which power is used for the manufacture. Where power is not used the number of workers should be 20 or more.

A worker is defined in the Act as a person, employed directly or through any agency, whether for wages or not, in any manufacturing process, or in cleaning any part of the machinery or premises used for a manufacturing process or in any other kind of work incidental to or connected with the munufacturing process, or the subject of the manufacturing process.

TABLE 22.1

DISTRIBUTION OF WORKING POPULATION (1971)

Category	Male		Female		Total	
	Total	Percentage	Total	Percentage	Total	Percentage
Total population	28,39,36,614	51.82	26,40,13,195	48.18	54,79,49,809	100.00
Total workers	14,90,75,136	52.50	3,12,98,263	11.85	18,03,73,399	32.92
(i) Cultivators	6,89,10,236	38.20	92,66,471	5.14	7,81,76,707	43.34
(ii) Agricultural labourers	3,16,94,984	17.57	1,57,94,399	8.76	4,74,89,383	26.33
(iii) Livestock, forestry, fishing hunting and plantations, orchards and allied activities	35,13,848	1.95	7,82,953	0.43	42,96,801	2.38
(iv) Mining and quarrying	7,98,696	0.44	1,24,066	0.07	9,22,762	0.51
(v) Manufacturing, processing, servicing and repairs						
(a) Household industry	50,20,893	2.78	13,30,821	0.74	63,51,714	3.52
(b) Other than household industry	98,50,808	5.46	8,64,997	0.48	1,07,15,805	5.94
(vi) Construction	20,11,831	1.12	2,03,477	0.11	22,15,308	1.23
(vii) Trade and commerce	94,82,044	5.26	5,56,199	0.31	1,00,38,243	5.57
(viii) Transport, storage and communications	42,55,257	2.36	1,45,944	0.08	44,01,201	2.44
(ix) Other services	1,35,36,539	7.50	22,28,936	1.24	1,57,65,475	8.74
Non-workers	13,48,61,478	47.50	23,27,14,932	88.15	36,75,76,410	67.08

TABLE 22.2 AVERAGE PER CAPITA ANNUAL EARNINGS OF FACTORY WORKERS

(*In rupees*)

State/Union Territory	1961	1966	1967	1968	1969	1970	1971	1972[1]
Andhra Pradesh	1,149	1,454	1,601	1,830	2,088	2,117	2,340	2,441
Assam	1,599	2,130	2,097	2,108	2,340	2,363	2,484	2,481
Bihar	1,856	2,050	2,196	2,432	2,486	2,712	2,752	2,630
Gujarat	1,702	2,340	2,663	2,696	2,643	2,820	2,763	2,885
Haryana	—	1,712	2 064	2,219	2,436	2,597	2,569	2,887
Himachal Pradesh	1,288	2,115	2,950	2,851	2,521	2,691	2,849	2,849[3]
Jammu & Kashmir	—	978	1,209	1,532	1,805	1,630	1,695	3,107
Karnataka	1,375	1,840	1,758	2,294	2,088	2,881	2,654	2,698
Kerala	1,152	1,724	2,009	2,125	2,467	2,419	2,565	2,565[3]
Madhya Pradesh	1,816	2,118	2,308	2,691	2,939	2,912	3,013	3,175
Maharashtra	1,775	2,480	2,676	2,826	2,903	3,030	3,090	3,250
Orissa	1,180	2,001	2,325	2,333	2,143	2,899	3,242	3,588
Punjab	1,174[2]	1,636	1,659	1,690	2,070	2,159	2,219	2,412
Rajasthan	761	1,412	1,882	1,853	2,003	2,486	2,507	2,824
Tamil Nadu	1,465	2,032	2,204	2,297	2,442	2,583	2,670	2,921
Tripura	—	1,271	1,897	1,945	2,010	2,223	2,790	1,091
Uttar Pradesh	1,264	1,825	1,978	2,157	2,200	2,293	2,501	2,570
West Bengal	1,410	2,024	2,175	2,382	2,675	2,761	3,028	3,452
Andaman & Nicobar Islands	1,234	1,621	1,566	1,791	2,024	2,170	2,302	2,096
Delhi	1,655	2,321	2,499	2,788	2,860	2,885	3,040	3,053
Goa, Daman & Diu	—	2,105	1,751	2,242	2,075	2,305	2,190	2,555
Pondicherry	—	—	—	—	—	2,427	2,673	2,776

[1] Provisional.
[2] Includes Haryana also.
[3] Repeated.

Real Earnings

The variation in real earnings, after taking into account the rise in the consumer price index, is shown in Table 22.3.

TABLE 22.3 INDEX OF REAL EARNINGS OF WORKERS

(1961—100)

Description	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
General index of earnings	106	109	114	128	139	151	160	170	180	185	191[1]
All-India working class consumer price index	103	106	121	132	146	166	171	169	178	183	194
Index of real earnings	103	103	94	97	95	91	94	101	101	101	103[1]

[1] Provisional.

Regulation of Wages

The payment of wages is governed by the Payment of Wages Act, 1936 and the Minimum Wages Act, 1948 as amended subsequently. The Payment of Wages (Amendment) Act 1976 extends to the whole of India and applies to persons employed in any factory as defined in the Factories Act, 1948 and in any railway, receiving wages and salaries which average below Rs 1,000 a month. The Act also provides for payment of wages, after obtaining the written permission of the employee, either by cheque or by crediting the wages in his bank account. It also provides for the written consent of the employee before deducting contributions towards the Prime Minister's National Relief Fund or to such other Funds as the Central Government may notify in the Official Gazette.

Employers cannot withold the wages earned by workers nor can they make any unauthorised deductions. Industrial establishments employing less than 1,000 workers must pay wages before the expiry of the 7th day and in other cases before the expiry of the 10th day after the last day of the wage period. Fines can be imposed for only

those acts of omissions which have been approved by the appropriate government and must not exceed an amount equal to three paise in a rupee of the wage payable. Fines cannot be recovered in instalments or after the expiry of 60 days from the day of act or omission for which the fine is imposed. If the payment of wages is delayed or wrongful deductions are made, the workers or their trade unions can file claim. The payment of overtime in scheduled employments is governed by the Minimum Wages Act, 1948.

Minimum Wages

Employers in India are free to hire an employee on any terms which the employee will accept. However, the Minimum Wages Act, 1948 seeks to prevent 'sweated labour' and exploitation of labour. It also empowers the appropriate government, central or state, to fix minimum wages of employees working in industries specified in the Schedule. Wage rates under the Act have been fixed and notified by the central and state governments in their respective spheres.

The Act also provides for revision of minimum wages already fixed, after suitable intervals. In 1973 the central government revised the minimum wages in scheduled employment in: (i) building and construction, stone breaking and stone crushing, (ii) agriculture, and (iii) manganese mines, barytes mines, bauxite mines and gypsum mines.

In 1974, a number of state governments and union territories either fixed for the first time or revised the minimum rates of wages in certain scheduled employments. Andhra Pradesh fixed the minimum rates of wages in motion picture industry; Bihar in refractories, fire-bricks and ceramic industry; Orissa in hotels, restaurants, and eating houses, shops and commercial establishments and cinema industry; Uttar Pradesh in glass and glass products, including glass bangle making; Delhi in clubs, plastic, rubber and PVC including cable industry. The state govrnments of Andhra Pradesh, Assam, Madhya Pradesh, Maharashtra, Karnataka, Kerala, Orissa, Punjab, Uttar Pradesh and the union territory of Delhi have also revised the minimum rates of wages in some of the scheduled employments.

Equal Remuneration

After the declaration of Emergency a number of legislative measures have been enacted under the 20-Point Economic Programme for the benefit of weaker sections of the society. Through an ordinance on 26 September 1975, which became an Act on 11 February 1976, equal remuneration was assured to men and women workers throughout the country.

The Act provides for the payment of equal remuneration to men and women workers, for the same work or work of similar nature. It prevents discrimination on the ground of sex against women in the matter of employment and for matters connected therewith except where the employment of women in such work is prohibited or restricted by or under any law for the time being in force. To provide increasing employment opportunities for women a provision for the setting up of advisory committees by the state governments has been made.

Bonus

The Payment of Bonus Act 1965 was amended on the recommendations of the Bonus Review Committee constituted by the central government. The amending Act known as the Payment of Bonus (Amendment) Act 1976 became operative with effect from 25 September 1975. The Act provides for payment of bonus on the basis of profits or production or productivity. Bonus becomes payable on allocable surplus over a cycle of four years even if it be a marginal amount. The Act provides

minimum bonus at four per cent of salary wages subject to a maximum of twenty per cent. The amount of minimum bonus in absolute terms has been raised from Rs 25 to Rs 60 in the case of persons below 15 years of age and from Rs 40 to Rs 100 in case of others. State governments have been empowered to apply the Act to any establishment employing ten or more workers by giving two months' notice.

Occupational Wage Surveys

Surveys are conducted from time to time to collect information about occupational wage rates and earnings data, extent of overtime and incentive bonus schemes for workers employed in major manufacturing, mining and plantation industries. The first survey was conducted in 1958-59 and its general report published in 1963. The second was carried out in 1963-65 and a summary report of its findings was released in 1971. The general report of the survey is under print. In view of the usefulness of the data collected during the first two surveys, the National Commission on Labour recommended periodic surveys in 81 industries in manufacturing, mining and plantation sectors. The Third Occupational Wage Survey got under way on 1 April 1973. The first phase of the survey covering 14 factories, has been completed.

Contract Labour

The Contract Labour (Regulation and Abolition) Act, 1970, which, became applicable to the whole of India in February 1971, provides for the regulation of employment of contract labour in certain establishments and for its abolition in certain circumstances. It also fixes responsibility on the principal employer for payment of wages in case of defaults.

The Labour Bureau has conducted special studies on the extent and nature of contract labour in 24 different industries so far. There were 3,997 principal employers with 5,21,300 contract labourers registered with the Government under the Act at the end of 1974.

Bonded Labour

The bonded labour system in the country has been abolished through a legislation, known as the Bonded Labour System (Abolition) Act 1976, to prevent the economic and physical exploitation of the weaker sections of the people. Under the Act which extends to the whole country, the bonded labour system stands abolished and every bonded labourer stands freed and discharged from any obligation to render any bonded labour. Accordingly all contracts for bonded labour, attachment for recovery of bonded debt etc. stand null and void. Even the bonded labourer detained in civil prison, whether before or after the judgment, stands released. No person, who has been freed and discharged under this Act, shall be evicted from any homestead or other residential premises which he had occupied immediately before the commencement of this Act as a part of the consideration for the bonded labour. Government through a series of rules and regulations is trying to rehabilitate economically and socially the freed bonded labour.

INDUSTRIAL RELATIONS

Industrial Disputes

The Industrial Disputes Act, 1947 is the principal central legislation which provides a machinery for the settlement of industrial disputes. In addition, the Code of Discipline (1958) and the Industrial Truce Resolution (1962) also help in the promotion and maintenance of good industrial relations, 3,12,70,000 (provisional) mandays were lost due to strikes and lockouts during 1974 as compared to 2,06,30,000 days in 1973.

Industrial Employment Standing Orders

Model rules have been framed by the central government under the Industrial Employment (Standing Orders) Act, 1946 for adoption by industrial establishments employing one hundred or more workers to ensure industrial peace. An amendment of the Act in 1961 empowered the appropriate government to extend it to establishments employing less than 100 workers. Another amendment in 1963 made the Model Standing Orders, framed by the appropriate government, operative in all industrial establishments covered by them until the Standing Orders framed by the industrial establishments are certified.

The Act now applies to all establishments in Andhra Pradesh, Gujarat, Maharashtra and West Bengal employing 50 workers or more. In Assam, it covers establishments (except mines, quarries, oil-fields and railways) which employ 10 workers or more. In Tamil Nadu, all factories registered under the Factories Act, 1948 are covered. In U.P., the Act has been extended to all member establishments of the Employers' Association of Northern India and of U.P. Oil-Mill Owners' Association, electric supply undertakings, water works and industrial establishments engaged in glass industry, oil mills registered as 'factories', establishments employing more than 50 workers in textiles, engineering, printing presses, ginning and pressing, shellac industries, flour, dal and rice mills, and all industrial establishments voluntarily applying for certification of Standing Orders.

Code of Discipline

The Code of Discipline, as evolved at the Indian Labour Conference, in 1958, has so far been accepted, apart from all the central employers' and workers' organisations, by 180 employers and 166 trade unions which are not members of any of the central employers' and workers' organisations. The Code is also applicable to public sector undertakings run as companies and corporations except those under the Ministry of Defence, Railways and Ports and Docks. The Department of Defence Production has agreed to apply the code, with some modifications, to its public sector undertakings run as companies and Corporations. The Code has also been applied, with certain modifications, to the insurance industry, the State Bank of India and the Reserve Bank of India. The Indian Banks Association, and the All-India Bank Employees' Federation have agreed to abide by the Code. They are, however, yet to come to an agreement on the criteria for recognition of unions.

The Code of Discipline requires employers and workers to utilise the existing machinery for the settlement of disputes and avoid direct action. The implementation organisations, at the centre and in the states, assist in settling disputes. The central organisations of employers and workers and public sector undertakings except the AITUC, have also set up committees or cells to screen cases for dissuading their affiliate members from filing appeals in higher courts against the judgments of industrial tribunals or labour courts in keeping with the letter and spirit of the Code.

Industrial Truce

To ensure industrial truce during emergency in the country, an Industrial Truce Resolution was adopted by the central organisations of employers and workers in 1962 which laid down that in such an event there will be no interruption or slowing down of production; on the other hand, production will be maximised and defence effort promoted in all possible ways. A standing committee with the Union Minister of Labour and Employment as chairman was set up in 1963 to review the working of the Truce Resolution. It has

since been merged with the Central Implementation and Evaluation Committee.

National Arbitration Promotion Board

A National Arbitration Promotion Board was set up by the Government of India in 1967 to promote voluntary arbitration as a means of settling industrial disputes. The Board comprises representatives of the employers' and workers' organisations, public undertakings and central and state governments. In 1972, the Board decided that voluntary arbitration shall normally be the next step for resolving industrial disputes where mutual negotiations and conciliations have failed. The Board has released a panel of arbitrators, revised model principles for settlement of disputes towards voluntary arbitration and issued an aide-memoire of guidelines for arbitrators. Arbitration Promotion Boards have been set up by all the state governments and union territory administrations except, Orissa, Punjab, Uttar Pradesh, and West Bengal.

Grievance Procedure

The grievance procedure framed under the Code of Discipline aims at redressing the day-to-day grievances of workers. Every establishment is expected to follow the procedure laid down in the Code. The Central Industrial Relations Machinery tries to persuade defaulting managements to frame grievance procedure in their undertakings. Periodic studies are also undertaken to review the progress made in this direction.

Works Committees

Works Committees have been set up in industrial establishments employing one hundred or more workers. They consist of representatives of employers and workmen and provide a forum for negotiations at the factory level. At the end of 1974, Works Committees were functioning in 752 establishments in the central sector.

Joint Management Councils

The scheme of Joint Management Councils was introduced in 1958 on a voluntary basis to ensure closer association of workers in management on a formally defined basis. Eighty such councils were functioning in public and private sector establishments at the end of 1974, the Councils aim at establishing cordial relations between the parties building up understanding, increasing productivity and securing better welfare facilities for the workers and training them to share the representatives of the management. Workers are also serving as Directors on the Boards of all nationalised banks. On 31 October 1975, government introduced through a resolution the scheme of workers' participation in industry at the shop-floor and plant levels to begin with.

Workers' Representation in Management

The central government have decided to introduce a scheme for the appointment of workers' representatives on the Boards of Management of a few public sector undertakings on a trial basis. As a beginning, a worker-director has been appointed in the Hindustan Antibiotics Ltd., Pimpri, and in the nationalised banks.

Conciliation and Adjudication

The Central Industrial Relations Machinery, also known as the Central Chief Labour Commissioner's Organisation, is responsible for the prevention, investigation and settlement of industrial disputes under the Industrial Disputes Act, 1947. It also enforces some labour laws in the central sphere.

When industrial disputes cannot be resolved by mutual negotiations, the conciliation machinery steps in. It is compulsory for the

conciliation officer to hold conciliation proceedings when an industrial dispute exists or is apprehended in a public utility service but it is optional in the case of other industrial establishments.

The Industrial Disputes Act also provides for voluntary or compulsory adjudication of industrial disputes. Seven Industrial Tribunals-*cum*-Labour Courts have been set up to adjudicate disputes in the central sphere. Of these, three are at Dhanbad, two at Bombay and one each at Calcutta and Jabalpur. The states have their own tribunals and labour courts. The Industrial Tribunal-*cum*-Labour Court at Delhi, under the Delhi Administration, also deals with some cases in the central sphere. National tribunals are set up by the central government when required.

To promote better industrial relations, the central government set up a National Commission on Labour in 1966 with Dr. P.B. Gajendragadkar as chairman. Its report was presented to the government in 1969. Government has accepted several recommendations made by the commission and taken follow-up action.

Lay Off and Retrenchment

In order to prevent avoidable hardships to the employees and to maintain higher tempo of production and productivity after the declaration of Emergency, the Government amended the Industrial Disputes Act 1947 to prevent lay-offs and retrenchments. Under the new Act, known as the Industrial Disputes (Amendment) Act 1976, reasonable restrictions have been put on employer's right to lay off, retrenchment and closure. Now the employer has to seek prior approval of the appropriate government by giving at least a three months' notice before the intended closure stating clearly the reasons for laying off, retrenchment and closing of industrial establishment where three hundered or more workmen are employed. In the interest of rehabilitation of workmen and maintenance of supplies and services essential to the life of community, the Act also provides for restarting the undertakings which have already closed down otherwise than on account of unavoidable circumstances beyond the control of the employer. Under the new Act no workman employed in any industrial establishment who has been in continuous service for not less than one year, shall be retrenched without giving three months' notice in writing indicating the reasons for retrenchment. He is also entitled to compensation equivalent to 15 days of every completed year of continuous service or any part thereof in excess of six months.

National Labour Institute

The National Labour Institute was set up in New Delhi on 1 July 1974 to disseminate knowledge of the necessary techniques and skills to those required to handle labour relations at central and state levels on a tripartite basis. The framework of the Institute is so designed as to reflect and enlist the support of the major parties involved in labour matters. The Institute is also involved in inter-related and inter-linked activities of education and training, research, consultancy and publication.

TRADE UNIONS

The Indian Trade Unions Act, 1926 provides for the registration of trade unions. Any seven or more members of a trade union, may, by subscribing their names to the rules of the trade union and otherwise complying with the provisions of the Act with respect to registration, apply for registration of the trade union under the Trade Unions Act. The Act gives protection to registered trade unions in certain cases against civil or criminal action.

Table 22.4 shows the number and membership of the registered trade unions in India.

TABLE 22.4
REGISTERED TRADE UNIONS AND MEMBERSHIP

Particulars	Central unions			State unions		
	1955-56	1970[1]	1971[1]	1955-56	1970[1]	1971[1]
Number of unions on register ..	174	802[2]	847[2]	7,921	19,512[2]	19,865[2]
Number of unions submitting returns ..	105	320[3]	200[4]	3,901	6,683[3]	3,509[4]
Membership of unions submitting returns	2,13,000	7,10,751[3]	5,46,340[4]	20,62,000	35,30,318[3]	17,10,702[4]

[1] Provisional. [2] Estimated.
[3] Figures for Bihar, Kerala and Rajasthan are excluded.
[4] Figures for Andhra Pradesh, Assam, Bihar, Himachal Pradesh, Karnataka, Kerala, Rajasthan, Uttar Pradesh, West Bengal and Delhi are excluded.

SOCIAL SECURITY

Some of the important social security schemes which seek to provide adequate cover to the workers against such contingencies as ill health and industrial accidents, are described below.

Employees' State Insurance Scheme (ESI)

The Employees' State Insurance Act, 1948 applies to perennial factories using power and employing 20 or more persons. It provides for medical care, cash allowance during sickness, maternity, employment injury and pension for dependents on the death of a worker because of injury. Full medical care, short of hospitalisation, is also being progressively made available to the members of the family of the insured.

A 40-member Employees' State Insurance Corporation, an autonomous body consisting of MPs, representatives of the central and state governments, medical profession, employers and employees, administers the scheme.

As on 31 March 1975, there were 57 ESI hospitals with 9,204 beds, 25 ESI annexes with 467 beds and 781 dispensaries, including mobile/part-time and employers' utilisation dispensaries. About 43.23 lakh employees and 137.03 lakhs of their dependents were eligible for medical benefit under the scheme.

Employees' Provident Funds

Retirement benefits are available to the employees under the Employees' Provident Funds and Family Pension Fund Act, 1952. On 30 September 1974, it covered 133 industries all over India, except Jammu and Kashmir.[1] The Act does not apply to establishments registered under the Co-operative Societies Act, 1912, and employing less than 50 persons and working without the aid of power.

The employers contribute 6¼ per cent of the basic wage and dearness allowance, including the cash value of food concessions and retaining allowance payable to the employees. The employees make a matching contribution. The government have enhanced the rate of contribution to 8 per cent in the case of 89 industries employing 50 or more persons.

At the end of September 1974, the subscribers numbered 71,34,294 (26,02,772) in exempted and 45,31,522 in unexempted establishments). The receipts in provident funds, including interest earned, totalled Rs 3,124.90 crores while the amount refunded was Rs 1,255.73 crores.

[1] The state of Jammu and Kashmir enacted a separate legislation in 1961.

Gratuity Scheme

Under the Payment of Gratuity Act, 1972, employees in factories, mines, oil-fields, plantations, ports, railways, motor transport undertakings, companies, shops or other establishments are entitled to gratuity. This is payable at the rate of 15 days' wages for each completed year of service subject to a maximum of 20 months' wages. The Act does not affect the right of an employee to receive better terms of gratuity under any award or agreement or contract with the employer.

Death Relief

A Death Relief Fund was set up in January 1964 to ensure a minimum of Rs 500 as financial help to the nominees or heirs of deceased members of unexempted establishments. The limit was raised to Rs 750 on 1 August 1969. The benefit has been extended to cover nominees or heirs of such persons whose pay does not exceed Rs 500 per month at the time of death.

Family Pension

To provide long-term financial security to the families of industrial employees in the event of their premature death, the Coal Mines Family Pension Scheme 1971 and the Employees' Family Pension Scheme 1971 were introduced from 1 March 1971. They apply to employees covered under the Coal Mines Provident Fund, Family Pension and Bonus Schemes Act, 1948 and the Employees' Provident Funds and Family Pension Fund Act, 1952. The schemes are financed by diverting a portion of the employers' and employees' contributions to the Coal Mines Provident Fund and the Employees' Provident Funds with an additional contribution by the central government. The operating cost of the two schemes is borne by the central government. At the end of September 1974, there were 28.87 lakh members of the Employees' Family Pension Scheme and 3.58 lakh members of the Coal Mines Family Pension Scheme.

Coal Mines Provident Fund

Provident Funds in coal mines have been set up under the Coal Mines Provident Fund, Family Pension and Bonus Schemes Act, 1948. Except a few excluded categories, all persons employed in or connected with a coal mine, either directly by employers or through contractors, have to become subscribers to the fund when they have put in 60 days' attendance (above-ground miners) and 48 days' attendance (underground miners) in a calender quarter.

They are compulsorily required to contribute 8 per cent of their emoluments. The employers also have to make a matching contribution. Subscribers can make a voluntary contribution up to 8 per cent in excess of their compulsory contribution. They can get non-recoverable advances for house-building, for financing life insurance policies, meeting the expenses in connection with the marriage of daughter or for post-matriculation education of children, and for purchasing shares of consumers' co-operative societies. Full refund of provident fund balance is made in cases of superannuation, retrenchement, total incapacity or death.

As on 31 March 1975, there were 5,44,218 subscribers to the provident funds in 1,164 coal mines and ancillary organisations.

Coal Mines (Attendance) Bonus

A bonus scheme has been framed under the Coal Mines Provident Fund, Family Pension and Bonus Schemes Act, 1948 to provide an incentive to workers to be more regular in attendance. Under the scheme, workers who put in specified days of attendance were paid quarterly bonus at 10 per cent of the basic earnings in addition to wages. From January 1973, the scheme has been amended and a

worker is now entitled to bonus for the period for which he actually attends the mine.

As on 31 December 1974, the scheme covered 590 collieries all over India, except those in Jammu and Kashmir.

Workmen's Compensation

The Workmen's Compensation Act, 1923, as amended in 1962, requires the employers to compensate the workers against occupational diseases and injuries arising out of and in the course of employment. The Act has prescribed separate scales of compensation for death, permanent total disablement, permanent partial disablement and temporary disablement. The Act now covers workers whose monthly wages do not exceed Rs 500.

Maternity Benefits

Legislation covering the payment of maternity benefits, before and after confinement, is in operation in almost all the states. The Maternity Benefit Act, 1961 regulates the employment of women in certain establishments for certain periods before and after child birth and provides for maternity and other benefits. The Act applies for the present to mines, factories and plantations, including any such establishments belonging to government except those factories or establishments where provisions of the Employees' State Insurance Act, 1948 apply for the time being. It can be extended to other establishments by state governments, with prior approval of the central government. The Act was amended in 1973 to cover establishments in the circus industry.

LABOUR WELFARE

To enable workers to work in congenial surroundings, certain amenities such as, canteens, rest shelters, creches, medical aid and education and recreational facilities have been provided in factories, mines and plantations covered by the Factories Act, 1948, the Mines Act, 1952, the Plantations Labour Act, 1951 and the Bidi and Cigar Workers (Conditions of Employment) Act, 1966. Contract labour is also provided similar amenities under the Contract Labour (Regulation and Abolition) Act, 1970. Factories employing 500 or more workers have to appoint welfare officers to look after the welfare of the workers.

Welfare funds in central undertakings were created on a voluntary basis in 1966. Their scope is being enlarged to meet the social and educational needs of the workers.

Mines

For the welfare of mine workers, Welfare Funds have been set up in coal, mica, iron ore, limestone and dolomite mines. The finances for the funds are raised through the levy of a cess on the coke and coal despatches from the collieries, an *ad valorem* cess as customs duty on mica exports, a cess as duty of customs on export, a duty on internal consumption of iron ore and a cess on the limestone and dolomite consumed by the iron ore and steel plants and cement and other factories. The welfare activities include housing, public health and sanitation medical, educational and recreational facilities for workers and their dependents. It also covers provisions of a accident and other benefits.

Dock Labour

Various welfare measures are in operation for the dock workers in Bombay, Calcutta, Cochin, Kandla, Madras, Marmagao, Vishakhapatnam and other ports. These include housing, medical care, tuition fee concession for children and recreation and canteen facilities. Fair price shops and consumers' co-operative societies are also operating in some of the ports.

Plantation Labour

Under the Plantations Labour Act, 1951, all plantations provide housing accommodation to their resident workers and their families and maintain hospitals or dispensaries for them. Some of the plantations also run elementary schools for the educations of the labourers' children. Training in useful handicrafts, such as tailoring, knitting, weaving and basket-making and recreational facilities are provided in some of the tea estate centres with the help of the Tea Board.

The Act was amended in 1960 to check fragmentation of plantations by employers to escape their liabilities.

Motor Transport Workers

The Motor Transport Workers' Act, 1961 provides for the welfare of motor transport workers and for the regulation 'of their working conditions. The various schemes in operation include canteens, rest rooms, uniform hours of work and leave. The Act is administered by the state governments which have framed rules for its enforcement.

WORKERS' EDUCATION

The object of the workers' education scheme is to create a well-informed and responsible labour force capable of organising and running trade unions on sound lines. The Central Board for Workers' Education, consisting of representatives of central and state governments, organisations of employers and workers and educationists, is a registered society for implementing the scheme. It has established 37 regional centres to cover- important industrial centres. It also gives grants-in-aid to trade unions and institutions for workers' education.

The programme of workers' education is divided into three stages. Under the first stage, training is given to Education Officers who are wholetime employees of the Board. In the second stage, workers sponsored by trade unions are trained for three months by the Education Officers. These workers are called 'worker-teachers'. In the third stage, worker-teachers conduct classes for other workers at their places of employment. On 31 March 1975, the number of worker—teachers and workers trained was 34,244 and 23,36,413 respectively.

WORKERS' SAFETY

National Safety Awards

Various schemes for the grant of National Safety Awards to factories, covered by the Factories Act, 1948, and ports have been instituted for good safety records. Each scheme consists of cash prizes and certificates of merit. Sixty-four factories, two stevedoring firms and two port authorities were given the awards in 1974-75.

Safety in Mines

The Mines Act, 1952 and the rules, regulations and bye-laws made thereunder, provide for the regulation of labour and safety in mines. The fatality per thousand persons in coal mines declined from 0.73 in 1956 to 0.48 in 1974. The rate for all mines was 0.42 in 1974 as against 0.51 in 1973 .

National Safety Council

The National Safety Council was set up in 1960. Its main function is to conduct seminars, organise film shows in factories and distribute posters on the subject of safety.

In January, 1975 the Council's membership consisted of 923 corporate members and 188 individual members.

Shram Vir Awards

Shram Vir Awards have been instituted for workers in factories, mines, plantations and docks. They are given in recognition of meritorious performance,— such as suggestions leading to higher productivity or economy or greater efficiency. Thirty-two workers were given Shram Vir Awards in 1974-75.

AGRICULTURAL LABOUR

According to the 1971 Census, agricultural labourers in India numbered 4.75 crores representing 26.33 per cent of the total work force in the country. The corresponding figures in 1961 were: 3.15 crores workers and 16.71 per cent of the total number of workers. This increase in the number of agricultural labour has been accompanied by a decrease in the number of cultivators from 9.95 crores in 1961 to 7.82 crores in 1971.

The average annual income of an agricultural labour household in India during 1950-51 was Rs 447.00; during 1956-57 it fell to Rs 437.47 but increased to Rs 660.19 during 1963-64. The 25th round of the National Sample Survey has revealed that during the period July 1970 to June 1971, the average earnings as wages per man-day for the country as a whole were Rs 2.03 for the landless worker and Rs 1.80 for small cultivators.

The Minimum Wages Act, 1948 and the Trade Unions Act, 1926 are applicable to agricultural labour. Agricultural farms run on commercial lines are also covered by the Industrial Disputes Act, 1947. The Employees' Provident Funds and Family Pension Fund Act, 1952 is applicable to agricultural labour engaged in specified plantations. Workers employed in farming by tractor or other mechanical power or by electricity are already covered by the Workmen's Cmpensation Act, 1923.

The government has set up a standing committee on agricultural labour, *inter alia* to review the existing legislative and other provisions for the welfare of agricultural labour and to suggest a comprehensive legislation on the subject.

Rural Labour Enquiry

The Rural Labour Enquiry was conducted between 1963-65 through the National Sample Survey. Data were collected on consumption expenditure, income, employment, unemployment, earnings and indebtedness of rural labour households (including agricultural labour households). The final report on the Enquiry has since been published. The field work of the Second Rural Labour Enquiry was completed in June 1975.

EMPLOYMENT

At the beginning of the Fourth Plan the number of people employed in the organised sector was 166.30 lakhs. The figure was 192.80 lakhs in March 1974 showing an increase of about 26.50 lakhs. The bulk of the increase was in the public sector which accounted for 23.80 lakhs. However, as accurate estimates of employment and unemployment in the country were not available, the National Sample Survey undertook a comprehensive labour survey in its 27th round, the results of which are awaited.

Despite the substantial increase in the number of jobs in the organised sector, unemployment[1] has grown in the absolute as well as proportionate terms. During the Fourth Plan period several special schemes were taken up, in both rural and urban areas to make a dent on the otherwise deteriorating unemployment situation. The schemes were over and above the normal developmental programmes included in the Plan.

The Fifth Plan, therefore, regards the employment problem as

[1] According to the Report of the Committee on Unemployment, the likely number of unemployed persons in 1971 may reasonably be taken as 1.87 crores including 90 lakhs as unemployed and 97 lakhs who work for less than 14 hours a week and who may be treated on par with the unemployed.

the most important challenge to be met. It has identified some of the major causes for the continued increase in unemployment. Among the causes mentioned are that the educational system and social tradition come in the way of people going in for employment requiring manual work, entrepreneurs shy away from less developed areas with the result that there is stagnation in employment in these areas. The investments in the previous Plans have not generated the job opportunities which were anticipated.

Among the basic objectives of the Fifth Plan are the removal of poverty and inequalities of income, and these objectives are sought to be achieved, among others, by accelerating the pace of employment generation. The Plan stresses that programmes for investment should be labour intensive to the extent possible and to the extent they fit into the overall socio-economic objectives. Wage employment alone, it is recognised, is inadequate to meet the situation fully. The need for greater, self-employment opportunities has, therefore, been emphasised and for this purpose major efforts would be made in agriculture, small industry services, commerce and trade etc. The Fifth Plan seeks to add more job opportunites for the poorer sections and to increase earnings of those who are now marginally employed.

The experience of the special employment programmes of the Fourth Plan will be used in building up more employment opportunities in the Fifth Plan.

National Employment Service

The National Employment Service (NES), started in 1945 consists of a net work of employment exchanges manned by trained personnel. The exchanges assist all employment seekers, specially the physically handicapped, ex-servicemen, scheduled castes and scheduled tribes, university alumni and professional and executive personnel. The NES also carries out other functions, such as the collection and dissemination of employment market information and conducting studies in the field of emoloyment and occupational research, which provide the basic data for framing policy on some aspects of manpower.

Under the Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959, it is obligatory for all establishments in the public sector and non-agricultural establishments in the private sector employing 25 or more workers to notify their vacancies (with certain exemptions) to the employment exchange and supply periodic information.

The number of employment exchanges in the country on 31 December 1974 was 535 including 54 University Employment Information and Guidance Bureaux. Table 22.5 gives figures relating to the activities of the exchanges.

TABLE 22.5 EMPLOYMENT EXCHANGES AND APPLICATIONS

Year	No. of exchanges[2]	No. of registrations	No. of applicants placed in employment	No. of applicants on the live register	Monthly average no. of employers using the exchanges	No. of vacancies notified
1956 ..	143	16,69,985	1,89,855	7,58,503	5,346	2,96,618
1961 ..	325	32,30,314	4,04,707	18,32,703	10,397	7,08,379
1966 ..	396	38,71,162	5,07,342	26,22,460	12,908	8,52,467
1971 ..	437	51,29,857	5,06,973	50,99,919	12,910	8,13,603
1972[1,3] ..	453	58,26,916	5,07,111	68,96,238	13,154	8,58,812
1973[3] ..	465	61,45,445	5,18,834	82,17,649	13,366	8,71,398
1974 ..	481	51,76,274	3,96,898	84,32,869	12,175	6,72,537

[1] Includes 15 professional and executive employment offices.
[2] Excludes University Employment Information and Guidance Bureaux. [3] Revised.

Administration

The day-to-day administrative control over the employment exchanges was transferred to the state governments in November 1956. From April 1969, the states were also made financially responsible for the manpower and employment schemes. The role of the central government is limited to policy-making, co-ordination of procedure and standards, and the development of various programmes on an all-India basis.

Vocational Guidance

Vocational guidance and employment counselling services are provided to youth (applicants without any work experience) and adults (with specific work experience) at 229 employment exchanges and all the University Employment Information and Guidance Bureaux.

In order to divert educated youth to channels of gainful employment, vocational guidance and career advising programmes of the Directorate-General of Employment and Training (DGE&T) have been expanded and streamlined. A career study centre at the Central Institute for Research and Training provides career literature for the occupational orientation of the youth and other guidance seekers.

Exchanges for Physically Handicapped

There are 13 special exchanges for the physically handicapped. They are functioning at Ahmadabad, Bangalore, Bombay, Calcutta, Chandigarh, (one for Punjab and the other for Haryana), Delhi, Hyderabad, Jabalpur, Kanpur, Madras, Patna and Trivandrum. Till December 1974, 43,317 applicants had registered with them out of whom 12,746 persons had been placed in employment.

Six vocational rehabilitation centres for the physically handicapped are functioning at Bombay, Delhi, Hyderabad, Jabalpur, Kanpur and Ludhiana. Till December 1974, they admitted 5,748 persons out of whom 1,794 were rehabilitated.

Training Programmes

In an endeavour to build up the career of young persons in their adolescence, the DGE&T has evolved various training programmes. These are formulated within the national framework as far as possible and also in collaboration with foreign countries.

STUDIES/ SURVEYS

During 1974-75 the DGE&T undertook a number of surveys/studies to examine the extent to which the live register of employment exchanges reflects levels of unemployment to assess the performance of a specific cohorts of graduates in the employment market, trends of emerging manpower in a given industry and types of occupations in an area.

Craftsmen's Training

Industrial training institutes have been set up all over the country to impart skills in 32 engineering and 22 non-engineering trades to youngmen and women in the age group 15-25. At present 357 such institutes are providing free training facilities to about 1.56 lakh craftsmen.

To promote the efficiency of craftsmen-trainees, the DGE&T has introduced aptitude tests which are applied for the selection of craftsmen-trainees in engineering trades. During 1974 ,aptitude tests for 84,757 candidates were conducted in 15 engineering trades for the selection of trainees in industrial training institutes including Model Training Institutes in states. The aptitude testing programme has also been extended to industries in different regions for selecting suitable candidates as apprentices under the Apprentices Act 1961.

The duration of the courses varies from one to two years for engineering trades, but is one year for all non-engineering trades. Successful candidates are awarded National Trade Certificates.

Besides 54 trades, the state governments and union territories have introduced training in additional trades to meet the requirements of the new industries established in their areas.

The educational qualification for admission in the industrial training institutes in most of the trades under the Craftsmen's Training Scheme is 8th standard or two classes below the matriculation or its equivalent. For some trades, such as electronics, radio and TV, electricians, draftsmen (mechanical/civil) and surveyors, the minimum qualification is matriculation or its equivalent with mathematics and science.

The industrial training institutes have also started a scheme to train Other Ranks in the Indian Army to facilitate their rehabilitation in civil life on their release or retirement from service. Under the scheme introduced from August 1972, provision has been made to train 1,000 army personnel every year.

Craft Instructors Training

Seven central training institutes at Bombay, Calcutta, Hyderabad, Kanpur, Ludhiana, Madras and New Delhi train craft instructors required by the Industrial Training Institutes and the Apprenticeship Training Establishments. The institute at New Delhi is exclusively meant for women instructors. The seven institutes, with an admission capacity of about 1,200, impart training in a number of trades. Facilities for the training of instructors have also been provided in chemical group of trades at the Bombay institute, and in hotel and catering at the Hyderabad institute. Facilities for training in printing, weaving and farm mechanics trades are also being provided at Institutes in Kanpur, Bombay and Ludhiana respectively.

Advanced Training to Craftsmen

The Advanced Training Institute, set up at Madras in 1971, conducts advanced training courses for highly skilled craftsmen from industry in specialised areas like tool designing, tool and die making, measurement techniques, heat treatment and welding. During the Fifth Plan, satellite centres of advanced training are being set up at various Central Training Institutes to meet the local needs of advanced skill training.

An advanced training institute for electronics and process instrumentation has been established at Hyderabad to train highly skilled technicians in fields such as domestic/industrial/medical/electronics and process instrumentation.

Foremen's Training

An institute to train foremen was established in Bangalore in 1971. It trains existing and potential shop foremen and supervisors in theoretical and managerial skills and workers from industry in advanced technical skills. The facilities generated at this institute are being made available through satellite centres at four Central Training Institutes.

Apprenticeship Training Scheme

The Apprentices Act, 1961 makes it obligatory for employers in specified industries to engage apprentices. The training consists of basic training followed by on-the-job or shop-floor training in accordance with standards prescribed by the government in consultation with the Central Apprenticeship Council. So far, 201 industries and 61 trades have been brought under the Act. Over 66,704 apprentices were undergoing training on 30 September 1974. The Apprentices (Amendment.) Act, 1973 provides for reservation of seats for scheduled castes and scheduled tribes candidates as well as for improving the employment potential of engineering graduates and diploma holders.

The Apprenticeship Rules 1962 have been amended vide Apprenticeship Rules (Amendment) 1975 to cover the training of graduate engineers and diploma holders under the provisions of Amended Apprentices Act 1973.

Part-time Training to Industrial Workers

Along with the expansion of facilities for the training of craftsmen in institutes and through the apprenticeship programme, evening classes have been organised to improve the standards of industrial workers who may enter the industry without any systematic training.

Industrial workers, irrespective of their age, but possessing two years' workshop experience in a particular trade and sponsored by their employers are eligible for admission to this course. The period of training is two years and the fee charged is Rs 2 per month.

Vocational Training Research

A Central Staff Training and Research Institute was set up at Calcutta in 1970 for developing indigenous training techniques. The Institute conducts training programmes for officers and staff of the central and state governments as well as from industry who control, regulate and direct training programmes. It also carries out research in trades and training techniques, prepares training aids and advises industry on industrial training methods.

COMMITTEE ON AUTOMATION

A Committee on Automation was set up by the central government in 1969 with Shri R. Venkataraman as chairman to review the effect of automation in enterprises in which it has already been introduced. It was also to suggest criteria for determining areas and fields in which automation, including computers, may be permitted and to recommend safeguards for avoiding or minimising any harmful social effects of automation. Its report was presented to the government in 1972. Contents of the report are not released yet.

23 HOUSING

The problem of housing in India is a complex one requiring finances on a huge scale and is dependent for its solution on the concerted efforts of individuals, cooperatives and central and state governments to be planned and executed over a number of years. There is acute shortage of housing in urban and rural areas and much of the available accommodation is qualitatively of sub-standard variety. The shortage in urban areas has been largely on account of considerable increase in population since 1921, the steady shift of population from the rural to the urban areas, the haphazard growth of towns owing to lack of proper town planning and the comparative inability of private enterprise to keep pace with the growing demand.

Though no precise data are available about the shortage of housing in the country, the 1971 census placed the shortage at 1.45 crore units; 29 lakhs in urban areas and 1.16 crores in rural areas. A recent study by the National Buildings Organisation, after taking into account the increase in households owing to the natural growth of population and net addition to the housing stock during 1971-74, estimated the housing shortage on the eve of the Fifth Plan at 1.56 crore units; 38 lakhs in urban areas and 1.18 crores in rural areas.

According to the 1971 census, the usable housing stock was 8.25 crore units (6.84 crores in 1961) for the use of the entire population of 54.8 crores divided into about 9.7 crore households. Of these, 6.64 crore units (5.71 crores in 1961) were in rural areas and 1.61 crore units (1.13 crores in 1961) in urban areas.

POLICY

Responsibility for the formulation of the housing policy is borne by the central and state ministers in-charge of housing, urban development and town planning. A review of the policy was made by the State Ministers of Housing at a conference held in October 1975.

The conference took note of the follow-up actions on the recommendations of the earlier conferences and considered various ways and means to expedite their implementation, particularly in the light of the 20-Point Economic Programme. The important recommendations of the conference were: (i) a national urbanisation policy should be framed to achieve a balanced urban and regional growth in the country; (ii) a national housing policy should be adopted and, for this purpose, a national housing commission should be set up immediately; (iii) a rural housing corporation should be set up for implementing the rural housing programme along with rural development through institutional and other finances; (iv) state governments should quantify funds out of their annual plan allocations for housing scheduled castes and scheduled tribes; (v) the central government should enact legislation on vacant urban property expeditiously so that urban and urbanisable land is made available to the government for improving housing conditions for the urban poor as well; (vi) building costs of houses should be reduced by improved technology, use of local materials and reduction of overheads of public housing agencies; (vii) an appropriate proportion of the institutional finances available with states should be allocated for house-building by stepping up the existing investments; and (viii) the scheme of allotment of house-sites to rural workers should be transferred back to the central sector to effectively implement it.

HOUSING FINANCE

Most of the funds for housing are provided by the central and state governments. The Life Insurance Corporation of India also supplements their efforts. The central government has constituted a Revolving Fund of Rs 200 crores for housing and urban development. The Fund is administered by the Housing and Urban Development Corporation which advances loans to state governments, State Housing Boards and Housing and Urban Development Authorities.

Investment and Achievements

In the first three Five Year Plans and the three Annual Plans, a total of Rs 324.27 crores was spent in the public sector on various social housing schemes. During the period, about five lakh dwelling units were constructed. In the private sector, an investment of Rs 2,400 crores was estimated to have gone into housing and other private construction. During the Fourth Plan, a total of Rs 469.91 crores was spent in the public sector on various social housing schemes. In the private sector, an investment of about Rs 2,140 crores was estimated to have gone into housing and private construction. The Plan outlays for 1974-75 for all the state governments and union territory administrations in respect of state sector schemes was Rs 52.39 crores, out of which a sum of Rs 8.32 crores had been earmarked for the scheme for provision of house-sites to landless workers which forms part of the Minimum Needs Programme of the government. For the year 1974-75, a sum of Rs 80 lakhs was provided for the Subsidised Housing Scheme for Plantation Workers. The number of housing units constructed up to April 1975 under the various social housing schemes was about 6,38,500 (including 3,923 housing units constructed under the aforesaid scheme).

The Life Insurance Corporation of India advanced loans amounting to Rs 200.55 crores to the various state governments (including the Delhi Development Authority) up to 1974-75. The Housing and Urban Development Corporation sanctioned loans amounting to Rs 126.56 crores for 175 housing schemes of 16 states and 2 union territories involving construction of 92,700 housing units and development of over 18,000 plots of various categories, the bulk of which was aimed to benefit weaker sections of the society.

In the Fifth Plan, a provision of Rs 343 crores has been made for the state sector and Rs 237.16 crores for the central sector schemes. In addition, about Rs 450 crores are likely to be spent by central departments like the Railways, Posts and Telegraphs, Defence, Port Trusts and central government public undertakings. The investment in housing by the private sector is expected to be Rs 3,640 crores.

RESEARCH

Research into building techniques and into new methods of house construction is carried out by the National Buildings Organisation (NBO), which was set up by the Government of India in 1954 as an advisory and co-ordinating body for all technical matters concerning building and housing. The NBO also sponsors research work on various aspects of building construction, improvement of utilization of building materials and on the sociological and economic aspects of housing. Five rural housing wings at Vallabh Vidya Nagar (Anand), Bangalore, Calcutta, Chandigarh and New Delhi are functioning under NBO for research, training and extension work in rural housing and village planning.

The Organisation, which is the national agency for collection of building and housing statistics, also functions as the United Nations regional housing centre for ESCAP region.

The NBO has set up a permanent building exhibition in Nirman Bhavan, New Delhi, where building materials and products available in the market and also new and improved materials evolved by research organisations are on display.

PRODUCTION OF MATERIALS

The Hindustan Housing Factory at New Delhi, a Government of India company, apart from manufacturing pre-fabricated homes, specialises in producing several other items, such as, pre-fabricated reinforced cement concrete components, pre-stressed cement concrete transmission poles, foam concrete panels, and partition and insulation blocks. It undertakes wooden joinery work and has standardised certain pre-cast building components for use by individual house-builders and construction agencies.

CONSTRUCTION AGENCY

The National Buildings Construction Corporation, New Delhi, a public sector undertaking, undertakes construction works on behalf of the central government and its various agencies. It also owns a mechanised brick plant in Delhi.

SOCIAL HOUSING SCHEMES

About 6,38,500 houses had been constructed up to 30 April 1975 by state governments and administrations in union territories under the various social housing schemes, excluding slum clearance and improvement scheme. In addition, about 11,170 hectares of land were acquired by state governments and over 5,665 hectares of land developed for housing purposes.

A brief resume of the progress of various schemes since their inception is given below.

State Sector Schemes

The Integrated Subsidised Housing scheme, which came into operation in 1966, is intended for low paid industrial workers and other economically weaker sections of the community whose wages or incomes do not exceed Rs 350 per month. Under the scheme, houses are constructed and let out on rents subsidised to the extent of 50 per cent of the approved cost of construction. Up to 30 April 1975, 1,82,223 houses had been constructed.

The Low Income Housing scheme, started in 1954, enables persons (or their cooperatives) whose income does not exceed Rs 7,200 per annum to get loans for constructing houses. The amount of the loan is restricted to 80 per cent of the cost of developed land subject to a maximum of Rs 14,500. Up to 30 April 1975, construction of 2,43,047 houses had been completed.

The Middle Income Group Housing scheme, launched in 1959, is generally financed from the funds made available by the Life Insurance Corporation of India as loans to state governments. In the union territories, the funds are provided by the central government. Loans are available under the scheme to individuals whose income is in the range of Rs 7,201 to Rs 18,000 per annum for the construction of houses. The loans are restricted to 80 per cent of the cost of a house subject to a maximum of Rs 27,500. Loans are also given to eligible persons for the purchase of ready built houses. Up to 30 April 1975, 33,844 houses had been constructed.

The Rental Housing scheme for state government employees was introduced in 1959. Under the scheme, state governments construct residential accommodation and rent it out to their employees. Up to 30 April 1975, 23,669 houses had been completed.

The Village Housing Projects scheme provides for the grant of loans for construction of houses by villagers to the extent of 80 per

cent of the cost of construction, subject to a maximum of Rs 4,000 and also for providing streets and drains to improve the environmental hygiene of the villages. Up to 30 April 1975, 56,858 houses, about 246 km of streets and 189 km of drains had been completed.

The Land Acquisition and Development scheme, started in 1959, enables state governments and administrations in the union territories to acquire and develop land in urban areas so that developed plots can be made available at reasonable prices to intending house builders, particularly those in the lower income groups. Its object is to stabilise land prices, rationalise urban development and promote self-contained composite housing colonies. Up to 30 April 1975, over 10,800 hectares of land had been acquired and over 5,665 hectares of land developed by various state governments.

Central Sector Schemes

A scheme for providing free house-sites for landless workers is being implemented since 1971. The Government of India provides full assistance to state governments for meeting the expenditure on development of house-sites and acquisition of land, wherever necessary, for providing free house-sites to landless workers in rural areas. The maximum size of a house-site which is allowed to a landless family is normally 100 sq yd. Up to 31 March 1974, projects of 15 state governments, involving central assistance of Rs 19.77 crores, had been approved for the provision of 8,85,502 house-sites. Besides, 15 states, namely, Andhra Pradesh, Bihar, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal and 3 union territories, namely, Chandigarh, Lakshadweep and Pondicherry have adopted legislative measures to confer home-stead rights on landless workers who are in occupation of such sites in rural areas.

From the commencement of the Fifth Plan, the scheme has been transferred to the state sector. State governments can now scrutinise and sanction the projects, in accordance with the provisions of the scheme, in their respective jurisdiction as one of the Minimum Needs Programme. So far, the state governments of Bihar, Haryana, Himachal Pradesh and West Bengal have sanctioned projects for the provision of 88,878 house-sites at an estimated cost of about Rs 1.27 crores. In the Fifth Plan, Rs 108.16 crores have been set aside, under the Minimum Needs Programme for annual plan allocations to the states, for provision of house-sites to landless workers in rural areas. It is expected that about 40 lakh landless workers will be provided with free house-sites during the Fifth Plan period.

The Government of India has issued certain guidelines to state governments for proper and efficient implementation of the scheme. The scheme was intensified following the launching of the 20-Point Economic Progromme. Up to 31 December 1975, over 58.35 lakh house-sites had been allotted to homeless rural workers.

The subsidised housing scheme for plantation workers is in operation since 1956. Under the scheme, the central government pays 50 per cent loan and 37½ per cent grant for construction of accommodation for allotment free of rent to plantation labour, which is concentrated in six states, namely, Assam, Karnataka, Kerala, Tamil Nadu, Tripura and West Bengal. Cooperatives of plantation workers receive financial assistance up to 90 per cent of the approved cost of a project: 65 per cent as loan and 25 per cent as subsidy. The number of plantation workers eligible for housing facilities is estimated to be 6,76,384 of whom 4,19,618 have been provided with housing facilities.

The central government also has a scheme under which it grants loans to its employees, including those governed by the Payment of Wages Act, on the basis of a welfare scheme sanctioned in 1956 for building houses and for the purchase of ready built houses. Till 31 March 1975, loans totalling Rs 58.55 crores had been approved.

URBAN DEVELOPMENT

In India, the concept of planned urban development is of recent origin. Although development schemes for urban areas were drawn up and implemented from the beginning of the Five Year Plans, the need for planned urban development was recognised only in the Third Plan when an allocation of Rs 3 crores was made by the central government for giving grants to state governments for this purpose. Till March 1969, the scheme for urban development continued as a centrally-sponsored programme. From 1 April 1969 the preparation of Master and Regional plans was transferred to state governments with the central government acting only in an advisory capacity. In the Fourth Plan, an allocation of Rs 73.47 crores was made for the urban development programme. An outlay of Rs 90 crores has been made in the Fifth Plan for the Housing and Urban Development Corporation under the central sector.

TOWN AND COUNTRY PLANNING ORGANISATION

To accelerate the pace of urban development, the Town and Country Planning Organisation in the union Ministry of Works and Housing assists the state governments in organising their Town and Country Planning Departments, preparation of development plans for cities and regions, formulation of comprehensive town and country planning legislation, evaluation and progress of town planning projects, formulation of traffic and transportation plans and landscape planning. The organisation is also connected with the preparation of inter-state regional plans and development plans for backward regions.

Socialisation of Urban Land

To socialise urban and urbanisable land as provided in the 20-Point Economic Programme, the Urban Land (Ceiling and Regulation) Act came into force in February 1976. The Act puts a ceiling on the ownership of urban vacant land, which varies between 500 sq metres and 2,000 sq metres depending on the categorisation according to size of urban agglomerations. The Act also empowers government to acquire vacant land in excess of ceiling limits, prescribes compensation payable therefor, and also puts a ceiling on the plinth area of proposed buildings.

Important Programmes

Among the important programmes on which work is in progress is the National Capital Regional Plan around Delhi which covers an area of about 30,000 sq km in the union territory of Delhi and parts of Haryana, Rajasthan and Uttar Pradesh. The plan envisages integrated regional development programmes for drinking water supply, drainage, power supply, community facilities and services over the whole region. A sum of Rs 20 crores has been earmarked in the Fifth Plan for supplementing the resources of state governments for implementing the plan. For 1974-75, a sum of Rs 36 lakhs was provided for the scheme of Development of the National Capital Region. Out of this, Rs 34 lakhs were given as loan assistance to the constituent states of National Capital Region, namely, Haryana, Rajasthan and

Uttar Pradesh for supplementing the investments made by them for the development of ring towns of Gurgaon, Alwar and Meerut. Work is also under way in the region covering parts of Bihar, Madhya Pradesh, Orissa and West Bengal.

A network of mass rapid transit system (MRTS) for Delhi urban area has been identified by the metropolitan transport team of the Planning Commission. The Metropolitan Transport Project (Railways) is conducting techno-economic and engineering feasibility studies of the MRTS network. The Town and Country Planning Organisation is carrying out traffic studies for MRTS.

Development of Metropolitan Cities

For development of metropolitan cities and areas of national importance, a new scheme has been included in the Fifth Plan. Under the scheme, the central government will supplement the efforts of state governments in this direction. An outlay of Rs 230 crores has been provided for the Fifth Plan period. For 1974-75, a sum of Rs 14.84 crores was provided under the scheme. Out of this, Rs 14.51 crores were given as loan assistance to the governments of Andhra Pradesh, Maharashtra, Tamil Nadu and West Bengal for supplementing the investments made by them for the integrated development of their capital towns and to the governments of Madhya Pradesh and Punjab for supplementing the investments made by them for the integrated development of their cities of Bhopal and Indore and Ludhiana.

In Delhi, an Urban Art Commission has been set up for preserving, developing and maintaining the aesthetic quality of urban and environmental design within Delhi.

Slum Clearance and Improvement Scheme

The Slum Clearance and Improvement scheme was introduced in 1956 as a centrally-sponsored programme under which financial assistance was given to states and union territories for the clearance and improvement of slum areas and rehousing of slum dwellers whose income does not exceed Rs 350 per month. From 1 April 1969 the scheme was transferred to states.

Environmental Improvement of Slums

To bring about improvement of environmental conditions in slum areas, a programme known as the Central Scheme for Environmental Improvement in Slum Areas was launched in 1972 in 10 cities, namely, Ahmadabad, Bombay, Bangalore, Delhi, Hyderabad, Kanpur, Lucknow, Madras, Nagpur and Pune. During 1973-74, ten more cities, *viz.*, Calcutta, Cochin, Cuttack, Gauhati, Indore, Jaipur, Ludhiana, Patna, Rohtak and Srinagar were also covered under the scheme. The Bustee Improvement scheme in Calcutta was also made part of the programme. The concerned state governments were given full financial assistance for the provision of drinking water, sewerage and drains, community bath and latrines, street lighting and widening and paving of existing lanes in slum areas. Till 31 March 1974, 854 projects worth over Rs 24.60 crores had been sanctioned. A sum of over Rs 20.23 crores was released to the states in respect of these projects. Out of this, an expenditure of over Rs 14.21 crores had been incurred by the end of March 1974.

The scheme has been transferred from the central sector to the state sector from 1 April 1974 to be implemented by state governments as one of the Minimum Needs Programme. A sum of Rs 105.47 crores has been provided in the Fifth Plan for this purpose. It is also proposed to cover cities with population of 3 lakhs and above, or one city in each state where the scheme has not so far been extended.

Jhuggi and Jhonpri Removal Scheme

The Jhuggi and Jhonpri Removal scheme is designed to provied alternative accommodation to unauthorised occupants of government and public lands in Delhi and New Delhi. By 31 December 1973, 58,956 houses and plots had been sanctioned under the scheme.

Delhi Land Acquisition Scheme

A scheme known as the Large Scale Acquisition, Development and Disposal of Land is in force in Delhi. Under the scheme, land measuring about 14,505 hectares has been acquired so far. Of this, about 10,300 hectares have been allotted to the Delhi Development Authority and about 3,400 hectares have been allotted to various government, semi-government and other organisations.

24 LAWS OF PARLIAMENT

Out of the Bills which were pending before Parliament from the previous years and the Bills which were introduced during 1974, 68 Bills were enacted as laws, including three Bills to amend the Constitution. In 1975, (up to 31 August,) 57 Bills were enacted as laws. The scope and purpose of some of the important laws enacted are given below. Lists of Bills enacted as laws in 1974 and 1975 are given in the Tables 24.1 and 24.2.

The Constitution (Thirty-second Amendment) Act, 1973

Assented to by the President on 3 May 1974, the Act confers the necessary Constitutional authority for giving effect to the Six-Point Formula in respect of the state of Andhra Pradesh in so far as it relates to the provision of equitable opportunities for people of different areas of the State of Andhra Pradesh in the matter of admission to educational institutions and public employment and constitution of an Administrative Tribunal with jurisdiction to deal with certain disputes and grievances relating to public services. It also seeks to empower Parliament to legislate for establishing a Central University in the State.

The Constitution (Thirty-third Amendment) Act, 1974

Articles 101(3) and 190 (3) of the Constitution permit a member of either House of Parliament or a member of a House of the Legislature of a state to resign his seat by writing under his hand addressed to the presiding officer of the House of which he is a member. The amendment would enable the presiding officer not to accept such resignation if he, after making such inquiry as he thinks fit, is satisfied that the resignation is not voluntary or genuine.

The Constitution (Thirty-fourth Amendment) Act, 1974

Amends the Ninth Schedule to the Constitution to include therein the revised land ceiling laws which had then been enacted in broad conformity with the guidelines formulated on the basis of the suggestions made by the Chief Ministers' Conference so that those laws may not be questioned as being inconsistent with the provisions of Part III relating to Fundamental Rights.

The Esso (Acquisition of Undertakings in India) Act, 1974

Provides for acquisition of the undertakings in India of Esso Eastern Inc., a foreign company which was carrying on in India the business of distributing and marketing petroleum products manufactured by Esso Standard Refining Company of India Limited and Lube India Limited.

The Presidential and Vice-Presidential Elections (Amendment) Act, 1974

Amends the Presidential and Vice-Presidential Elections Act, 1952, to include suitable provisions to discourage persons from contesting as candidates to the highest office of President or Vice-President with-

out even a remote chance of getting elected and to prevent persons from going to a court of law challenging in a light hearted manner the election to such office.

The Water (Prevention and Control of Pollution) Act, 1974

Provides for establishing agencies in the centre and the states for the prevention, and control of pollution of rivers and streams, for maintaining or restoring wholesomeness of such water courses and for controlling discharges of domestic and industrial wastes.

The Direct Taxes (Amendment) Act, 1974

Amends the Income-tax Act, 1961 and other taxation Acts to provide for certain tax concessions for encouraging industries in selected sectors and in backward areas and for promotion of research and development and exports.

The Coal Mines (Conservation and Development) Act, 1974

Repeals the Coal Mines (Conservation, Safety and Development) Act, 1952 and provides for special arrangements for conservation and development of coal and ensures safety in coal mines.

The Major Port Trusts (Amendment) Act, 1974

Seeks to apply the provisions of the Major Port Trusts Act, 1963, to the three ports of Bombay, Calcutta and Madras as recommended by the Commission on Major Ports constituted by the Government of India in 1968.

The Essential Commodities (Amendment) Act, 1974

Provides for stricter enforcement of the provisions of the Act and stringent punishment for offenders under the Act including a term of three months as the minimum punishment.

The Companies (Temporary Restrictions on Dividends) Act, 1974

Provides that for a specified period, dividends declared by certain companies should not exceed one-third of net profits after tax or an amount equal to 12 per cent dividend on the face value of equity shares of the company and dividends payable on preference shares. The temporary restrictions on the distribution of dividends by a company seek to curb consumer spending and promote savings in the economy.

The Additional Emoluments (Compulsory Deposit) Act, 1974

With a view to controlling inflation, different sections of the community are required to deposit compulsorily (a) for a period of one year, the whole of the additional wages, and (b) for a period of two years, one half of the additional dearness allowance. The deposit will to carry simple interest at a rate which will be 2½ per cent over and above the bank deposit rate and will be repayable in five equal annual instalments (together with interest thereon) from the expiry of the period for which the respective deposits are required to be made.

The Compulsory Deposit Scheme (Income-Tax Payers) Act., 1974

Requires certain classes of income-tax payers, namely, individuals, Hindu undivided families and trustees of private discretionary trusts in the higher income bracket to deposit a portion of their income during the period commencing 17 July 1974 and ending 31 March 1975 and the financial year 1975-76. This is one of the measures for dealing urgently and effectively with the mounting pressure of inflation.

The University of Hyderabad Act, 1974

Seeks to establish a teaching university at Hyderabad in the State of Andhra Pradesh in pursuance of the Six-Point Formula agreed upon.

The Interest-tax Act, 1974

Imposes a special tax on the total amount of interest received by scheduled banks on loans and advances made in India. The tax is expected to have both monetary and fiscal aspect in as much as it will serve the purpose of raising the cost of borrowed funds and supplementing government revenues.

The Oil Industry (Development) Act, 1974

Provides for the establishment of an Oil Industry Development Board for the development of oil industry and, for that purpose, to levy a duty of excise on crude oil and natural gas.

The Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974

Seeks to immobilise the links which facilitate violations of foreign exchange regulations and smuggling activities by providing for detention of the persons engaged in these operations.

The Sick Textile Undertakings (Nationalisation) Act, 1974

Provides for nationalisation of 103 sick textile mills in the country with a view to augmenting the production and distribution, at fair prices, of different varieties of cloth and yarn and to ensuring greater employment opportunities in them.

The Representation of the People (Amendment) Act, 1974

Replaces the Representation of the People (Amendment) Ordinance, 1974 which was meant to clarify that in reckoning the election expenses of a candidate for the purposes of section 77 of the Representation of the People Act, 1951, expenditure incurred or authorised by any person (other than the candidate or his election agent) or by any body of persons or political parties shall not be taken into account.

The Constitution (Thirty-fifth Amendment), Act, 1975

Under this Act, Sikkim was associated with the Union of India on the terms and conditions set out in the Tenth Schedule to the Constitution. These terms and conditions, *inter alia*, include responsibilities of the

Government of India in relation to Sikkim and representation of Sikkim in Parliament.

The Constitution (Thirty-sixth Amendment) Act, 1975

Under this Act, the First Schedule to the Constitution was amended to include Sikkim as a full-fledged state within the Union of India. The Assembly for Sikkim formed as a result of elections held in Sikkim in April 1974, is to be deemed to be the first Legislative Assembly of the new State of Sikkim. Besides making provision for the election of a representative of the State of Sikkim in the existing Lok Sabha by the members of the Legislative Assembly of Sikkim certain special provisions with respect to that State like the special responsibilities of the Government of India and extension of laws to that state have been provided for.

The Defence of India (Amendment Act), 1975

This Act amends the Defence of India Act, 1971, mainly with a view to applying the Act to ensure internal security, apart from defence of India and civil defence, consequent on the proclamation issued on 25 June, 1975.

The Conservation of Foreign Exchange and Prevention of Smuggling Activities (Amendment) Act, 1975

This Act amends the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974. The main amendments are for making special provisions in regard to detention under the parent Act which are necessary for dealing effectively with the Emergency and for providing that an order of detention made under the parent Act on two or more gounds shall be deemed to have been made separately on each of such grounds.

The Maintenance of Internal Security (Amendment) Act, 1975

Amends the Maintenance of Internal Security Act, 1971 in regard to detentions under the parent Act which are necessary for dealing effectively with the Emergency.

The Election Laws (Amendment) Act, 1975

This Act amends the Representation of the People Act, 1951, and the Indian Penal Code to provide for removal of certain anomalies relating to disqualification on the ground of corrupt practices relating to elections. Provision has also been made in the Representation of the People Act, 1951, to the effect that the case of every person found guilty of any corrupt practice by an order under section 99 of the Act shall be submitted to the President for determination of the question whether such person shall be disqualified and, if so, for what period.

The Banking Service Commission Act, 1975

This Act provides for the establishment of a Commission for the selection of personnel for appointment to certain services and posts in the nationalised banks, the State Bank of India and in the subsidiary banks of the State Bank of India.

The Constitution (Thirty-ninth Amendment) Act, 1975

Article 71 of the Constitution relating to election of President and Vice-President has been amended by this Act so as to provide that disputes relating to the election of President and Vice-President shall be determined by such forum as may be determined by Parliament by law. A new article 329A has also been inserted in the Constitution by this Act to make a similar provision in the case of election to either House of Parliament of a person holding the office of the Prime Minister and to Lok Sabha of a person holding the office of the Speaker.

TABLE 24.1

LAWS OF PARLIAMENT DURING 1974

Sl. No.	Bill	Initiating Chamber	When introduced	When passed by the originating Chamber	When passed/ returned by the other Chamber	Date of President's assent
1	2	3	4	5	6	7
1.	The Delhi Urban Art Commission Bill, 1973	L.S.	17-12-73	21-12-73	24-12-73	1-1-74
2.	The Code of Criminal Procedure Bill, 1973	R.S.	10-12-70	13-12-72 18-12-73[1]	12-12-73	25-1-74
3.	The Constitution (Thirty-Second Amendment) Bill, 1973[2]	L.S.	14-12-73	18-12-73	20-12-73	3-5-74
4.	The National Cooperative Development Corporation (Amendment) Bill, 1974[3]	L.S.	6-12-73	19-2-74	28-2-74	13-3-74
5.	The Esso (Acquisition of Undertakings in India) Bill, 1974	L.S.	25-2-74	5-3-74	12-3-74	13-3-74
6.	The Presidential and Vice-Presidential Elections (Amendent) Bill, 1974	L.S.	26-8-72	21-2-74	4-3-74	23-3-74
7.	The Water (Prevention and Control of Pollution) Bill, 1974[4]	R.S.	22-12-69	28-11-73 4-3-74[5]	21-2-74	23-3-74
8.	The Appropriation (Vote on Account) Bill, 1974	L.S.	20-3-74	20-3-74	21-3-74	26-3-74
9.	The North-Eastern Areas (Reorganisation) Amendment Bill, 1974	R.S.	21-2-74	28-2-74	25-3-74	27-3-74
10.	The Public Wakfs (Extension of Limitation) (Delhi Amendment) Bill, 1974	R.S.	27-11-73	29-11-73 18-3-74[6]	21-2-74	27-3-74
11.	The Appropriation (Railways) Bill, 1974	L.S.	22-3-74	22-3-74	25-3-74	27-3-74
12.	The Gujarat State Legislature (Delegation of Powers) Bill, 1974	R.S.	18-3-74	19-3-74	26-3-74	27-3-74
13.	The Economic Offences (Inapplicability of Limitation) Bill, 1974	R.S.	19-3-74	20-3-74	25-3-74	27-3-74
14.	The Gujarat Appropriation Bill, 1974	L.S.	22-3-74	22-3-74	25-3-74	28-3-74
15.	The Gujarat Appropriation (Vote on Account) Bill, 1974	L.S.	25-3-74	25-3-74	26-3-74	28-3-74
16.	The Appropriation (Railways) No. 2 Bill, 1974	L.S.	25-3-74	25-3-74	26-3-74	28-3-74
17.	The Appropriation (Railways) No. 3 Bill, 1974	L.S.	25-3-74	25-3-74	26-3-74	28-3-74
18.	The Appropriation Bill, 1974	L.S.	25-3-74	25-3-74	26-3-74	28-3-74
19.	The Pondicherry Appropriation (Vote on Account) Bill, 1974	L.S.	15-4-74	15-4-74	24-4-74	27-4-74
20.	The Appropriation (No. 2) Bill, 1974	L.S.	29-4-74	29-4-74	7-5-74	11-5-74

[1] Amendments made by Lok Sabha on 12-12-73 considered and agreed to by Rajya Sabha on 18-12-73.

[2] The Bill was introduced in Lok Sabha as "The Constitution (Thirty-third Amendment) Bill, 1973." The short title of the Bill was changed by Lok Sabha through an amendment to clause I.

[3] This Bill was introduced in Lok Sabha as "The National Cooperative Development Corporation (Second Amendment) Bill, 1973". The short title of the Bill was changed by Lok Sabha through an amendment to clause I.

[4] The Bill was introduced in Rajya Sabha as "The Prevention of Water Pollution Bill, 1969." The short title of the Bill was changed by Rajya Sabha through an amendment to Clause I.

[5] Amendments made by Lok Sabha on 21-2-74 considered and agreed to by Rajya Sabha on 4-3-74.

[6] Amendments made by Lok Sabha on 21-2-74 considered and agreed to by Rajya Sabha on 18-3-74.

1	2	3	4	5	6	7
21.	The Finance Bill, 1974	L.S.	28-2-74	4-5-74	9-5-74	11-5-74
22.	The Constitution (Thirty-third Amendment) Bill, 1974[7]	L.S.	3-5-74	8-5-74	14-5-74	19-5-74
23.	The Estate Duty (Distribution) Amendment Bill, 1974	L.S.	7-3-74	7-5-74	11-5-74	21-5-74
24.	The Additional Duties of Excise (Goods of Special Importance) Amendment Bill, 1974	L.S.	7-3-74	7-5-74	11-5-74	31-5-74
25.	The Union Duties of Excise (Distribution) Amendment Bill, 1974	L.S.	7-3-74	7-5-74	11-5-74	31-5-74
26.	The Gujarat Appropriation (No. 2) Bill, 1974	L.S.	23-7-74	23-7-74	30-7-74	2-8-74
27.	The Pondicherry Appropriation Bill, 1974	L.S.	30-7-74	30-7-74	5-8-74	9-8-74
28.	The Direct Taxes (Amendment) Bill, 1974	L.S.	3-9-73	1-8-74	12-8-74	18-8-74
29.	The Cinematograph (Amendment) Bill, 1974[8]	R.S.	20-8-73	27-8-73 7-8-74[9]	30-7-74	23-8-74
30.	The Coalmines (Conservation and Development) Bill, 1974	L.S.	30-4-74	22-7-74	13-8-74	26-8-74
31.	The Major Port Trusts (Amendment) Bill, 1974	L.S.	22-7-74	6-8-74	13-8-74	29-8-74
32.	The Essential Commodities (Amendment) Bill, 1974	R.S.	23-7-74	29-7-74	26-8-74	29-8-74
33.	The Finance (No. 2) Bill, 1974	L.S.	31-7-74	20-8-74	26-8-74	31-8-74
34.	The Industries (Development and Regulation) Amendment Bill, 1974	R.S.	24-7-74	5-8-74	28-8-74	31-8-74
35.	The Alcock Ashdown Company Limited (Acquisition of Undertakings) Amendment Bill, 1974	R.S.	1-8-74	8-8-74	28-8-74	31-8-74
36.	The Press Council (Amendment) Bill, 1974	R.S.	25-7-74	7-8-74	29-8-74	31-8-74
37.	The Companies (Temporary Restrictions on Dividends) Bill, 1974	L.S.	16-8-74	21-8-74	27-8-74	31-8-74
38.	The Indian Iron and Steel Company (Taking Over of Management) Amendment Bill, 1974	R.S.	25-7-74	8-8-74	30-8-74	31-8-74
39.	The Additional Emoluments (Compulsory Deposit) Bill, 1974	L.S.	19-8-74	27-8-74	31-8-74	1-9-74
40.	The Compulsory Deposit Scheme (Income-Tax Payers) Bill, 1974	L.S.	19-8-74	27-8-74	31-8-74	1-9-74
41.	The University of Hyderabad Bill, 1974	L.S.	30-7-74	7-8-74	19-8-74	3-9-74
42.	The Constitution (Thirty-fourth Amendment) Bill, 1974	L.S.	3-5-74	26-8-74	28-8-74	7-9-74
43.	The Esso (Acquisition of Undertakings in India) Amendment Bill, 1974	R.S.	2-9-74	3-9-74	7-9-74	7-9-74
44.	The Companies (Amendment) Bill, 1974	L.S.	11-8-72	5-8-74	22-8-74	10-9-74
45.	The Payment of Bonus (Amendment) Bill, 1974	R.S.	22-8-74	27-8-74	9-9-74	11-9-74
46.	The Appropriation (No. 3) Bill, 1974	R.S.	6-9-74	9-9-74	12-9-74	12-9-74
47.	The Appropriation (Railways) No. 4 Bill, 1974	L.S.	9-9-74	9-9-74	10-9-74	20-9-74
48.	The Interest-tax Bill, 1974	L.S.	2-9-74	7-9-74	10-9-74	23-9-74
49.	The Delhi Sikh Gurdwaras (Amendment) Bill, 1974	L.S.	26-7-74	7-9-74	10-9-74	23-9-74
50.	The Oil Industry (Development) Bill, 1974	L.S.	22-7-74	6-9-74	9-9-74	26-9-74
51.	The Indian Telegraph (Amendment) Bill, 1974	R.S.	25-4-74	22-7-74	21-11-74	30-11-74
52.	The Small Coins (Offences) Amendment Bill, 1974	R.S.	26-11-74	28-11-74	10-12-74	10-12-74
53.	The Indian Works of Defence (Amendment) Bill, 1974	R.S.	27-11-73	29-11-73 27-11-74[10]	12-11-74	12-12-74

[7] The Bill was introduced in Lok Sabha as "The Constitution (Thirty-fifth Amendment) Bill 1974". The short title of the Bill was changed by Lok Sabha through an amendment to clause I.

[8] The Bill was introduced in Rajya Sabha as "The Cinematograph (Second Amendment) Bill, 1973. The short title of the Bill was changed by Lok Sabha through an amendment to Caluse I.

[9] Amendments made by Lok Sabha on 30-7-74 considered and agreed to by Rajya Sabha on 7-8-74.

[10] Amendments made by Lok Sabha on 12-11-74 considered and agreed to by Rajya Sabha on 27-11-74.

1	2	3	4	5	6	7
54.	The Reserve Bank of India (Amendment) Bill, 1974[11]	R.S.	20-12-73	19-2-74 27-11-74[12]	18-11-74	13-12-74
55.	The Conservation of Foreign Exchange and Prevention of Smuggling Activities Bill, 1974	L.S.	25-11-74	6-12-74	11-12-74	13-12-74
56.	The Navy (Amendment) Bill, 1974	R.S.	21-11-73	22-11-73 27-11-74[13]	12-11-74	16-12-74
57.	The East Punjab Urban Rent Restriction Act (Extension to Chandigarh, Bill, 1974	R.S.	12-11-74	18-11-74	17-12-74	20-12-74
58.	The Repealing and Amending Bill, 1974	R.S.	18-11-74	25-11-74	17-12-74	20-12-74
69.	The Delhi Municipal Corporation (Amendment) Bill, 1974	R.S.	7-9-74	11-11-74	17-12-74	20-12-74
60.	The Sick Textile Undertakings (Nationalisation) Bill, 1974	L.S.	2-9-74	11-12-74	17-12-74	21-12-74
61.	The Representation of the People (Amendment) Bill, 1974	L.S.	21-11-74	16-12-74	19-12-74	21-12-74
62.	The Punjab Municipal (Chandigarh Amendment) Bill, 1974	R.S.	29-8-74	6-9-74	17-12-74	21-12-74
63.	The Working Journalists (Conditions of Service) and Miscellaneous Provisions (Amendment) Bill, 1974	R.S.	20-11-74	2-12-74	17-12-74	21-12-74
64.	The Appropriation (No. 4) Bill, 1974	L.S.	17-12-74	17-12-74	19-12-74	21-12-74
65.	The Gujarat Appropriation (No. 3) Bill, 1974[14]	L.S.	17-12-74	17-12-74	21-12-74	26-12-74
66.	The Gujarat Appropriation (No. 4) Bill, 1974[15]	L.S.	20-12-74	20-12-74	21-12-74	26-12-74
67.	The Pondicherry Appropriation (No. 2) Bill, 1974[16]	L.S.	20-12-74	20-12-74	21-12-74	26-12-74
68.	The Salaries and Allowances of Members of Parliament (Amendment) Bill 1974	L.S.	19-12-74	20-12-74	21-12-74	27-12-74

[11] The Bill was introduced in Rajya Sabha as "The Reserve Bank of India (Second Amendment) Bill, 1974". The short title of the Bill was changed by Rajya Sabha through an Amendment to clause I.

[12] Amendments made by Lok Sabha on 18-11-74 considered and agreed to by Rajya Sabha on 27-11-74.

[13] Amendments made by Lok Sabha on 12-11-74 considered and agreed to by Rajya Sabha on 27-11-74.

[14] The Bill was introduced in Lok Sabha as "The Gujarat Appropriation (No. 4) Bill, 1974." The short title of the Bill was changed by Lok Sabha through an amendment to clause I.

[15] The Bill was introduced in Lok Sabha as "The Gujarat Appropriation (No. 5) Bill, 1974". The short title of the Bill was changed by Lok Sabha through an amendment to clause I.

[16] The Bill was introduced in Lok Sabha as "The Pondicherry Appropriation (No. 3) Bill, 1974." The short title of the Bill was changed by Lok Sabha through an amendment to clause I.

TABLE 24.2

LAWS OF PARLIAMENT DURING 1975[1]

Sl. No.	Bill	Initiating Chamber	When introduced	When passed by the originating Chamber	When passed/ returned by the other Chamber	Date of President's assent
1.	The Indian Tariff (Amendment) Bill, 1975	L.S.	20-12-74	18-2-75	3-3-75	6-3-75
2.	The Requisitioning and Acquisition of Immovable Property (Amendment) Bill, 1975	R.S.	20-2-75	26-2-75	4-3-75	7-3-75
3.	The North-Eastern Areas (Reorganisation) Amendment Bill, 1975	R.S.	10-3-75	13-3-75	18-3-75	19-3-75
4.	The Tobacco Board Bill, 1975	L.S.	9-12-74	28-2-75	6-3-75	19-3-75
5.	The Appropriation (Vote on Account) Bill, 1975	L.S.	14-3-75	14-3-75	20-3-75	25-3-75
6.	The Appropriation (Railways) Bill, 1975	L.S.	19-3-75	19-3-75	22-3-75	25-3-75
7.	The Appropriation (Railways) No. 2 Bill, 1975	L.S.	19-3-75	19-3-75	22-3-75	25-3-75
8.	The Appropriation (Railways) No. 3 Bill, 1975	L.S.	19-3-75	19-3-75	22-3-75	25-3-75
9.	The Pondicherry Appropriation Bill, 1975	L.S.	20-3-75	20-3-75	24-3-75	29-3-75
10.	The Pondicherry Appropriation (Vote on Account) Bill, 1975	L.S.	20-3-75	20-3-75	24-3-75	29-3-75
11.	The Appropriation Bill, 1975	L.S.	20-3-75	20-3-75	24-3-75	29-3-75
12.	The Press Council (Amendment) Bill, 1975[2]	R.S.	21-12-74	26-2-75	24-3-75	29-3-75
13.	The Air Force and Army Laws (Amendment) Bill, 1975	R.S.	21-12-74	27-2-75	25-3-75	29-3-75
14.	The Gujarat Appropriation (Vote on Account) Bill, 1975	L.S.	21-3-75	21-3-75	25-3-75	29-3-75
15.	The Gujarat Appropriation Bill, 1975	L.S.	21-3-75	21-3-75	25-3-75	29-3-75
16.	The Trust Laws (Amendment) Bill, 1975	L.S.	10-3-75	17-3-75	20-3-75	29-3-75
17.	The Nagaland Appropriation Bill, 1975	L.S.	25-3-75	25-3-75	26-3-75	29-3-75
18.	The Nagaland Appropriation (Vote on Account) Bill, 1975	L.S.	25-3-75	25-3-75	26-3-75	29-3-75
19.	The Constitution (Thirty-seventh Amendment) Bill, 1975	L.S.	9-4-75	23-4-75	26-4-75	3-5-75
20.	The All-India Services Regulations (Indemnity) Bill, 1975	R.S.	16-11-72	21-11-72 30-4-75[3]	26-3-75	6-5-75
21.	The Tokyo Convention Bill, 1975	R.S.	11-11-74	27-11-74 29-4-75[4]	26-3-75	8-5-75
22.	The Appropriation (No. 2) Bill, 1975	L.S.	29-4-75	29-4-75	6-5-75	8-5-75
23.	The Rampur Raza Library Bill, 1975	R.S.	7-5-74	23-7-74 30-4-75[5]	26-3-75	9-5-75
24.	The All-India Services (Amendment) Bill, 1975	R.S.	21-12-74	3-3-75	6-5-75	9-5-75
25.	The Former Secretary of State Service Officers (Conditions of Service) Amendment Bill, 1975	R.S.	21-12-74	3-3-75	6-5-75	9-5-75
26.	The Finance Bill, 1975	L.S.	28-2-75	5-5-75	8-5-75	12-5-75
27.	The Tobacco Cess Bill, 1975	L.S.	7-3-75	5-5-75	8-5-75	12-5-75
28.	The Nagaland Appropriation (No. 2) Bill, 1975	L.S.	8-5-75	8-5-75	12-5-75	14-5-75
29.	The Constitution (Thirty-sixth Amendment) Bill, 1975[6]	L.S.	21-4-75	23-4-75	26-4-75	16-5-75
30.	The Companies (Temporary Restrictions on Dividends) Amendment Bill, 1975	L.S.	5-5-75	6-5-75	12-5-75	21-5-75

31.	The Government of Union Territories (Amendment) Bill, 1975	L.S.	15-4-75	6-5-75	12-5-75	22-5-75
32.	The Pondicherry Appropriation (No. 2) Bill, 1975	L.S.	23-7-75	23-7-75	25-7-75	29-7-75
33.	The Nagaland State Legislature (Delegation of Powers) Bill, 1975	R.S.	21-7-75	23-7-75	28-7-75	30-7-75
34.	The Defence of India (Amendment) Bill, 1975	R.S.	21-7-75	23-7-75	29-7-75	31-7-75
35.	The Kerala Legislative Assembly (Extension of Duration) Bill, 1975	R.S.	22-7-75	23-7-75	29-7-75	31-7-75
36.	The Finance (Amendment) Bill, 1975	L.S.	22-7-75	25-7-75	29-7-75	31-7-75
37.	The Conservation of Foreign Exchange and Prevention of Smuggling Activities (Amendment) Bill, 1975	L.S.	22-7-75	23-7-75	25-7-75	1-8-75
38.	The Appropriation (No. 3) Bill, 1975	L.S.	28-7-75	28-7-75	30-7-75	1-8-75
39.	The Appropriation (No. 4) Bill, 1975	L.S.	28-7-75	28-7-75	30-7-75	1-8-75
40.	The Employees' State Insurance (Amendment) Bill, 1975	R.S.	22-3-75	24-7-75	30-7-75	1-8-75
41.	The Constitution (Thirty-eighth Amendment) Bill, 1975[7]	L.S.	22-7-75	23-7-75	24-7-75	1-8-75
42.	The Maintenance of Internal Security (Amendment) Bill, 1975[8]	L.S.	23-7-75	25-7-75	29-7-75	5-8-75
43.	The Election Laws (Amendment) Bill, 1975	L.S.	4-8-75	5-8-75	6-8-75	6-8-75
44.	The Taxation Laws (Amendment) Bill, 1975	L.S.	12-8-71	28-7-75	30-7-75	7-8-75
45.	The Banking Service Commission Bill, 1975	L.S.	25-11-74	30-7-75	31-7-75	7-8-75
46.	The Delhi Sales Tax Bill, 1975	L.S.	9-4-73	29-7-75	31-7-75	7-8-75
47.	The Telegraph Wires (Unlawful Possession) Amendment Bill, 1975	R.S.	12-11-74	25-11-74 1-8-75[9]	30-7-75	7-8-75
48.	The Agricultral Refinance Corporation (Amendment) Bill, 1975	L.S.	10-3-75	31-7-75	1-8-75	7-8-75
49.	The Provident Funds (Amendment) Bill, 1975	L.S.	24-3-75	31-7-75	1-8-75	7-8-75
50.	The Constitution (Thirty-ninth Amendment) Bill, 1975[10]	L.S.	7-8-75	7-8-75	8-8-75	12-8-75
51.	The Indian Coinage (Amendment) Bill, 1975	L.S.	25-7-75	5-8-75	6-8-75	12-8-75
52.	The Salaries and Allowances of Members of Parliament (Amendment) Bill, 1975	L.S.	6-8-75	6-8-75	7-8-75	16-8-75
53.	The Cigarettes (Regulation of Production, Supply and Distribution) Bill, 1975	L.S.	22-4-75	5-8-75	7-8-75	16-8-75
54.	The National Cadet Corps (Amendment) Bill, 1975	R.S.	29-7-74	4-9-75 7-8-75[11]	5-8-75	16-8-75
55.	The Customs Tariff Bill, 1975	L.S.	10-5-74	6-8-75	7-8-75	18-8-75
56.	The Public Financial Institutions Laws (Amendment) Bill, 1975	L.S.	22-12-73	5-8-75	7-8-75	20-8-75
57.	The Constitution (Thirty-fifth Amendment) Bill, 1974	L.S.	2-9-74	4-9-74	7-9-74	22-2-75

[1] Up to 31 August 1975 only.

[2] The Bill was introduced in Rajya Sabha as "The Press Council (Second Amendment) Bill, 1974." The short title of the Bill was changed by Rajya Sabha through an amendment to clause I.

[3] Amendments made by Lok Sabha on 26-3-75 considered and agreed to by Rajya Sabha on 30-4-75.

[4] Amendments made by Lok Sabha on 26-3-75 considered and agreed to by Rajya Sabha on 29-4-75.

[5] Amendments made by Lok Sabha on 26-3-75 considered and agreed to by Rajya Sabha on 30-4-75.

[6] The Bill ws introduced in Lok Sabha as "The Constitution (Thirty-eighth Amendment) Bill, 1975." The short title of the Bill was changed by Lok Sabha through an amendment to clause I.

[7] The Bill was introduced in Lok Sabha as "The Constitution (Thirty-ninth Amendment) Bill, 1975".

[8] The Bill was introduced in Lok Sabha as "The Maintenance of Internal Security (Second Amendment) Bill, 1975." The short title of the Bill was changed by Lok Sabha through an amendment to clause I.

[9] Amendments made by Lok Sabha on 30-7-75 considered and agreed to by Rajya Sabha on 1-8-75.

[10] The Bill was introduced in Lok Sabha as "The Constitution (Fortieth Amendment) Bill, 1975." The short title of the Bill was changed by Lok Sabha through an amendment to caluse I.

[11] Amendments made by Lok Sabha on 5-8-75 considered and agreed to by Rajya Sabha on 7-8-75.

25 STATES AND UNION TERRITORIES

Note: Area figures for all states and union territories are provisional as on 1 July 1971 except in the case of Andaman and Nicobar Islands where they relate to 1 January 1966.

ANDHRA PRADESH

Area: 2,76,814 sq. km	*Population:* 4,35,02,708
Capital: Hyderabad	*Principal languages:* Telugu and Urdu

AGRICULTURE Agriculture is the main occupation of over 70 per cent of the people of Andhra Pradesh. Thirty-one per cent of the cultivated area is irrigated. The state is surplus in foodgrains, particularly rice. Other important crops are tobacco, oilseeds, cotton and sugarcane. The production of foodgrains was 67.11 lakh tonnes in 1972-73. The state accounts for about 50 per cent of the country's entire production of castor and 95 per cent of Virginia tobacco.

Forests cover 22.5 per cent of the state's area. Important forest products are timber, bamboo and casuarina.

INDUSTRY The state is endowed with a rich variety of minerals. In fact, Andhra Pradesh has a virtual monopoly of quality 'chrysotile asbestos' in the country. It accounts for about 75 per cent of India's total production of barytes. Other important minerals found are copper ore, manganese, mica, coal and limestone. The state ranks sixth in manganese ore production in the country.

Several major industries have been established in the state, especially around Hyderabad and Vishakhapatnam. These produce machine tools, synthetic drugs, pharmaceuticals, heavy electrical machinery, ships, fertilizers, electronic equipment and aeronautical parts.

IRRIGATION AND POWER Important irrigation schemes implemented during the past 25 years include Nagarjunasagar project, Prakasam barrage, Tungabhadra low level canal, Kurnool-Cuddapah canal, Kaddam project, Romperu Drainage project and Upper Penner project in addition to numerous other medium and minor irrigation schemes.

Important power projects are the Machchkund, Upper Sileru and Nizam Sagar hydel power schemes and Nellore, Ramagundam and Kothagudam thermal stations. The per capita consumption of electricity, which was 2.5 kwh at the beginning of the First Plan, rose to 44 kwh at the end of the Fourth Plan. The installed capacity, both hydel and thermal, was 888 mw in 1973-74. The state's prestige power project, the Srisailam hydro-electric project, is under construction.

GOVERNMENT *Governor:* Mohanlal Sukhadia

Council of Ministers[1]

Chief Minister: J. Vengal Rao
Cabinet Ministers: Pidatala Ranga Reddy, P. Basi Reddy, J. Chokka Rao, K. Rajamallu, Sagi Suryanarayana Raju, Mohamed Ibrahim Ali Ansari, V. Krishnamurthy Naidu, Battina Subba Rao, L. Lakshmana Das, G. Rajaram, Cholla Subbarayudu, M.V. Krishna Rao, C.H. Venkata Rao, T. Anjaiah and P. Narasa Reddy.
Ministers of State: C.H. Devananda Rao, Smt Lakshmi Devi, B. Srirama Murthy, Anam Venkat Reddy, V. Purushotham Reddy, P. Mahendranath, D. Munuswamy, S. Venkatram Reddy, Asif Pasha and K.V. Kesavulu.

Legislative Council[1]

Chairman: N. Venkatasubbiah
Deputy Chairman: Syed Mukkassir Shah

Legislative Assembly[1]

Speaker: R. Dasaratharama Reddy
Deputy Speaker: Syed Rahmat Ali

High Court[2]

Acting Chief Justice: A. Sambasiva Rao
Judges: C. Kondaiah, Alladi Kuppuswami, O. Chinnappa Reddy, K. Madhava Reddy, K. Ramachandra Rao, M. Ramachandra Raju, P. Sriramulu, T. Lakshmaiah, A.V. Krishna Rao, K.A. Muktadar, G. Venkatarama Sastry, P. Chennakesav Reddy, V. Madhava Rao, S.M. Rao, K. Punnayya and A. Raghuvir.
Additional Judges: A.G. Rao and K.J. Reddy.

Public Service Commission[1]

Chairman: S.A. Quader
Members: J. Veeraswami, Y. Sivasankara Reddi and T.V. Narayana.

Chief Secretary: N. Bhagwan Das

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Adilabad	16,133	12,88,348	Adilabad
2.	Anantapur	19,125	21,15,321	Anantapur
3.	Chittoor	15,763	22,85,536	Chittoor
4.	Cuddapah	15,356	15,77,267	Cuddapah
5.	East Godavari	10,970	30,87,262	Kakinada
6.	Guntur	11,377	28,44,488	Guntur
7.	Hyderabad	7,707	27,91,762	Hyderabad
8.	Karimnagar	11,824	19,63,928	Karimnagar
9.	Khammam	15,872	13,69,892	Khammam
10.	Krishna	8,734	24,93,574	Bandar/Masulipatnam
11.	Kurnool	18,799	19,82,090	Kurnool
12.	Mahbubnagar	18,419	19,32,082	Mahbubnagar
13.	Medak	9,685	14,67,944	Sangareddi
14.	Nalgonda	14,242	18,19,738	Nalgonda
15.	Nellore	13,058	16,09,617	Nellore
16.	Nizamabad	7,969	13,13,268	Nizamabad
17.	Prakasam	17,620	19,19,995	Ongole
18.	Srikakulam	9,743	25,89,991	Srikakulam
19.	Vishakhapatnam	13,799	28,05,366	Vishakhapatnam
20.	Warangal	12,875	18,70,933	Warangal
21.	West Godavari	7,744	23,74,306	Eluru

[1] As on 7 November 1975. [2] As on 1 June 1975.

ASSAM

Area: 78,523 sq. km[1]	*Population:* 1,46,25,152
Capital: Dispur	*Principal languages:* Assamese and Bengali

AGRICULTURE

The area under food crops accounts for over 72 per cent of the total cultivated area. The principal food crop is rice while the main cash crops are jute, tea, cotton, oilseeds, sugarcane, potato and fruits. Cultivation of wheat was virtually non-existent a decade ago. In recent years, wheat production has steadily increased; in 1973-74, it was 70,000 tonnes. Total production of some of the crops during 1974-75 was: foodgrains 20.75 lakh tonnes, oilseeds 1.84 lakh tonnes, sugarcane (gur) 1.48 lakh tonnes and jute 8.70 lakh bales.

Forests cover about 22 per cent of the total area of the state. The main forest products are timber, bamboo, reeds, medicinal herbs, lac, cane and elephant tusks.

INDUSTRY

Assam is rich in mineral wealth. It holds a unique position in the production of mineral oil. Other minerals found in the state are coal, limestone, refractory clay, dolomite, corundum and natural gas.

Of the agriculture-based industries, tea occupies an important place. There are nearly 750 tea plantations in the state. Petroleum and petroleum products form the other main industries. The state has two oil refineries and the third, with a petro-chemical complex, is under way. There is also a public sector fertilizer factory at Namrup. Other industries are sugar, jute, silk, paper, plywood manufacture and rice and oil milling. Important cottage industries are: handloom, sericulture, manufacture of cane and bamboo articles, carpentry, smithy and manufacture of brass utensils.

IRRIGATION AND POWER

The two medium irrigation schemes started in the state during the Third Five Year Plan and which spilled over to the Fourth Plan were the Yamuna and Sukla irrigation projects. The Yamuna project was commissioned in 1969.

Assam had only 20 electrified villages in 1951; the number increased to 1,400 in 1974. The installed capacity in 1973-74 was 121 mw.

GOVERNMENT

Governor: L.P. Singh

Council of Ministers[2]

Chief Minister: Sarat Chandra Sinha

Cabinet Ministers: Chatrasing Teron, Syed Ahmed Ali, Paramananda Gogoi, Md. Idris, Gojen Tanti, Harendra Nath Talukdar, Uttam Chandra Brahma, Upendra Chandra Das, Lutfur Rahman, Hiteswar Saikia, Md. Umaruddin, Girin Choudhury, Indreswar Khound, Surath Chandra Daolagupu and Lakshay Nath Doley.

Ministers of State: Swarna Prova Mahanta, Bisnu Prasad, Suren Das, Syeda Anwara Taimur, Suranjan Nandi, Debendra Nath Bora, Bijoy Sarma and Bhumidhar Barman.

Deputy Minister: Lila Kanta Das

Legislative Assembly[2]

Speaker: R.C. Barua

Deputy Speaker: Golok Chandra Rajbongshi

[1] As reorganised on 21 January 1972 according to North Eastern Areas (Reorganisation) Act 1971. [2] As on 15 October 1975.

High Court[1]

Chief Justice: M.C. Pathak
Judges: D.M. Sen, B.N. Sarma, Baharul-Islam and D. Pathak.

Public Service Commission[2]

Chairman: R.M. Das
Members: R.K. Bhuyan and N. Islam.

Chief Secretary: B.K. Bhuyan

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[3]

	District	*Area (Sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Cachar	6,962	17,13,318	Silchar
2.	Darrang	8,775	17,36,188	Tezpur
3.	Goalpara	10,359	22,25,103	Dhubri
4.	Kamrup	9,863	28,54,183	Gauhati
5.	Mikir Hills	10,332	3,79,310	Diphu
6.	North Cachar Hills	4,890	76,047	Haflong
7.	Nowgong	5,561	16,80,895	Nowgong
8.	Sibsagar	8,989	18,37,389	Jorhat
9.	Lakhimpur }			North Lakhimpur
10.	Dibrugarh }	12,792	21,22,719	Dibrugarh

BIHAR

Area: 1,73,876 sq. km	*Population:* 5,63,53,369
Capital: Patna	*Principal language:* Hindi

AGRICULTURE

Irrigated area forms about 26 per cent of the cultivable area of the state. The principal food crops are rice, wheat, maize, ragi and pulses. Main cash crops are sugarcane, oilseeds, tobacco and jute. The production of foodgrains was 75.32 lakh tonnes in 1973-74.

Forests cover about 17 per cent of the area. Important forest products are timber, *kendu* leaves, lac, gum and resin.

INDUSTRY

Bihar is one of the richest states in India in mineral wealth, accounting for about 40 per cent of the total mineral production in the country. It has huge deposits of copper, apatite and kyanite and sizeable deposits of coal, mica and china clay. It is also one of the principal iron ore producing states. Other important minerals found are manganese, limestone, graphite, chromite, asbestos, barytes, dolomite, felspar, columbite, pyrites, saltpetre, glass sands, slate, lead, silver, building stones and radio-active minerals.

The Tata Iron and Steel Company and the Tata Engineering and Locomotive Company at Jamshedpur, the fertilizer factory at Sindri, the heavy machine tool factory and foundry forge project at Ranchi, the steel plant at Bokaro, the oil refinery at Barauni, the aluminium plant at Muri (Ranchi), explosives factory at Gomia and paper factory at Dalmianagar , Hindustan Copper Corporation at Ghatsila, a zinc production unit at Tundu (Dhanbad), marine diesel engineering, ball bearing and wire rope units at Ranchi are some of the major industrial ventures in the state. The high tension insulator factory and the electric equipment factory at Ranchi and a modern rice mill at

[1]As on 1 June 1975. The entire North-Eastern region comprising Assam, Manipur, Meghalaya, Nagaland, Tripura, Arunachal Pradesh and Mizoram is under the jurisdiction of the Gauhati High Court.
[2]As on 15 October 1975. [3]*Source*: State Government.

Bikramganj are some of the important Bihar State public sector enterprises. There are 29 sugar factories, seven cement factories, seven distilleries, three jute mills and two wagon-making units.

Bihar is famous for its tussore silk industry, which employs more than one lakh persons. A spun silk mill in the public sector has been set up at Bhagalpur. Handicrafts occupy an important place among the cottage industries of Bihar.

Four Industrial Area Development Authorities are functioning at Adityapur, Bokaro, Patna and Ranchi and fourteen industrial estates are located in different parts of the state. With a view to stepping up the pace of industrial development the state government has set up the Bihar State Credit and Investment Corporation, the Bihar State Leather Industries Development Corporation, a sugar corporation, an export promotion corporation and the Bihar State Handloom, Powerloom and Handicrafts Development Corporation.

IRRIGATION AND POWER

Major irrigation projects are on rivers Kosi, Gandak, Sone, Badua, Chandan, North Koel and Bagmati. There are a number of small and medium irrigation projects to benefit tribal areas. Several flood control schemes are in various stages of completion. The state shares the benefits of the multi-purpose Damodar Valley project with West Bengal in respect of power.

Major power projects are the Patratu thermal power station and Subarnarekha hydro electric-*cum*-irrigation project, Barauni thermal power station under Bihar State Electricity Board and Bokaro and Chandrapur thermal power stations and Tilaiya, Maithon and Panchet hydel power stations under the Damodar Valley Corporation.

The total installed capacity of power, both hydel and thermal, in March 1974 was 1,314 mw. The number of electrified villages which was 4 in 1951 increased to 10,029 by March 1975. For irrigation, 1,05,319 pumpsets/tube-wells had been energised by March 1975 as against 47 in 1951.

GOVERNMENT

Governor: R.D. Bhandare

Council of Ministers[1]

Chief Minister: Jagannath Mishra
Cabinet Ministers: Smt Ram Dulari Sinha, Ram Jaipal Singh Yadev, Vidyakar Kavi, Ram Raj Prasad Singh, Ramashraya Prasad Singh, Narsingh Baitha, Bindeshwari Dubey, Karam Chand Bhagat, Theodore Bodra, Mohammad Hussain Azad and Ram Ratan Ram.
Minister of State: Taneshwar Azad

Legislative Council[2]

Chairman: Ram Govind Singh
Deputy Chairman: *Vacant*

Legislative Assembly[2]

Speaker: Hari Nath Mishra
Deputy Speaker: Shakoor Ahmad

High Court[3]

Chief Justice: Shyam Nandan Prasad Singh
Judges: K.B. Narain Singh, S.P. Singh, B.D. Singh, A.N. Mukharji, C.P. Sinha, Syed Sarwar Ali, M.M. Prasad, Jitendra Narain, S.P. Sinha, R.P. Sinha, D.P. Sinha, C.N. Tiwary, B.P. Jha, H.L. Agarwal, L.M. Sharma, S.K. Jha and N.P. Singh.

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[1] As on 16 October 1975. [2] As on 1 August 1975. [3] As on 1 June 1975.

Additional Judges: Muneshwari Sahay, S.K. Choudhuri, Udoy Sinha, Syed Ali Ahmed and B.P. Sinha.

Public Service Commission[1]

Chairman: Ram Autar Shukla
Members: Samu Charan Tubid, Dumar Lal Baitha, Anwar Karim, Kumar Bimal Sinha, Kumar Kaushalendra Narayan Singh and Hargovind Singh.

Chief Secretary: Saran Singh

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[2]

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Patna	3,181.9	22,50,883	Patna
2.	Nalanda	2,346.1	13,06,062	Biharshariff
3.	Gaya	4,287.5	19,24,289	Gaya
4.	Aurangabad	4,408.9	12,92,666	Aurangabad
5.	Nawadah	3,647.6	12,40,518	Nawadah
6.	Bhojpur	4,023.8	19,95,146	Arrah
7.	Rohtas	7,296.2	19,43,888	Sasaram
8.	Saran }		17,09,722	Chapra
9.	Siwan }	6,952.0	14,02,067	Siwan
10.	Gopalganj }		11,07,464	Gopalganj
11.	Champaran East	4,333.8	19,56,084	Motihari
12.	Champaran West	4,862.2	15,87,019	Bettiah
13.	Muzaffarpur	3,160.1	19,09,058	Muzaffarpur
14.	Vaishali	2,018.7	13,48,990	Hajipur
15.	Sitamarhi	2,659.2	15,82,622	Sitamarhi
16.	Darbhanga	2,296.0	15,17,151	Darbhanga
17.	Samastipur	2,856.4	18,24,718	Samastipur
18.	Madhubani	3,526.6	18,92,039	Madhubani
19.	Monghyr	7,927.6	27,45,180	Monghyr
20.	Bhagalpur	5,656.0	20,91,103	Bhagalpur
21.	Santhal Parganas	14,129.0	31,86,908	Dumka
22.	Begusarai	1,899.4	11,47,449	Begusarai
23.	Saharsa	5,885.0	23,50,268	Saharsa
24.	Purnea	7,989.7	28,84,990	Purnea
25.	Katihar	3,023.3	10,56,873	Katihar
26.	Palamau	12,677.0	15,04,350	Daltonganj
27.	Hazaribagh	11,152.5	16,45,838	Hazaribagh
28.	Giridih	6,907.5	13,74,376	Giridih
29.	Ranchi	18,331.0	26,11,445	Ranchi
30.	Dhanbad	2,994.0	14,66,417	Dhanbad
31.	Singhbhum	13,447.0	24,37,799	Chaibasa

GUJARAT

Area: 1,95,984 sq. km	*Population:* 2,66,97,475
Capital: Gandhinagar	*Principal language:* Gujarati

AGRICULTURE

Irrigated area forms 11.19 per cent of the total cultivated area of Gujarat. The main food crops are bajra, jowar, rice and wheat. Important commercial crops are cotton, tobacco and groundnut. Production of foodgrains was 36.28 lakh tonnes in 1973-74 as against 22.5 lakh tonnes in 1972-73. Production of sugarcane was 2.50 lakh tonnes, cotton 23 lakh bales and oil seeds 17.78 lakh tonnes in 1973-74 as against 1.80 lakh tonnes, 13.83 lakh bales and 4.21 lakh tonnes respectively in 1972-73.

Forests cover nine per cent of the area of the state. Main forest products are teak, *khair, haldarvo* and bamboo.

[1] As on 1 August 1975. [2] *Source:* State Government.

INDUSTRY

Textiles (including ginning and pressing of cotton), tobacco manufacture, drugs and chemicals, engineering goods, machine tools, paper, cement, and sugar are some of the important industries.

The discovery of oil and natural gas in Ankleshwar, Cambay and Kalol areas has put Gujarat on the country's oil map. The capacity of the refinery at Koyali has been expanded from 20 to 43 lakh tonnes a year.

Apart from textiles, readymade garments and synthetic fabrics, the state is exporting salt, drugs and pharmaceuticals, and electrical and engineering goods.

IRRIGATION AND POWER

Important irrigation schemes implemented since 1947 include Ukai, Kadana, Kakrapara, Mahi Right Bank Canal, Shetrunji, Dantivada and Hathmati reservoir projects.

The total installed capacity, both hydel and thermal, at the end of 1974-75 was 1,292 mw. Gujarat had only 117 electrified villages in 1951; the number increased to 5,893 by the end of 1974-75. For irrigation, 1,08,909 pumpsets had been energised as against 2,460 in 1951.

GOVERNMENT

Governor: K.K. Viswanathan

The State came under President's rule on 12 March 1976 following the resignation of the Government headed by Babubhai Jashbhai Patel after the State Assembly had rejected the budget demand for the Civil Supplies Department by 89 votes to 87.

Legislative Assembly[1]

Speaker: Kundanlal Dholakia
Deputy Speaker: Manubhai Palkhiwala

High Court[2]

Chief Justice: B.J. Divan
Judges: J.B. Mehta, A.D. Desai, J.M. Sheth, D.A. Desai, S.N. Patel, S.N. Seth, D.P. Desai, M.P. Thakkar, P.D. Desai, B.K. Mehta and T.U. Mehta.
Additional Judges: C.V. Rane, A.N. Surti, M.C. Trivedi and N.H. Bhatt.

Public Service Commission[3]

Chairman: P.C. Vaidya
Members: M.R. Gehani and H.K. Solanki

Chief Secretary: L.R. Dalal

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Ahmadabad	8,707	29,10,307	Ahmadabad
2.	Amreli	6,760	8,48,730	Amreli
3.	Banas Kantha	12,702	12,65,383	Palanpur
4.	Bharuch	9,045	11,09,601	Bharuch
5.	Bhavnagar	11,155	14,05,285	Bhavnagar
6.	Gandhinagar	649	2,00,642	Gandhinagar
7.	Jamnagar	14,125	11,11,343	Jamnagar
8.	Junagadh	10,607	16,56,677	Junagadh
9.	Kheda	7,194	24,51,387	Kheda
10.	Kutch	45,612	8,49,769	Kutch
11.	Mahesana	9,027	20,92,468	Mahesana
12.	Panchmahals	8,866	18,48,804	Godhra
13.	Rajkot	11,203	16,24,072	Rajkot
14.	Sabar Kantha	7,390	11,87,637	Himatnagar
15.	Surat	7,745	17,86,924	Surat
16.	Surendranagar	10,488	8,45,454	Surendranagar
17.	The Dangs	1,683	94,185	Ahwa
18.	Vadodara	7,788	19,80,065	Vadodara
19.	Valsad	5,238	14,28,742	Valsad

[1] As on 30 June 1975. [2] As on 1 June 1975. [3] As on 21 June 1975.

HARYANA

Area: 44,222 sq. km	*Population:* 1,00,36,808
Capital: Chandigarh	*Principal language:* Hindi

AGRICULTURE

Over 82 per cent of the people of Haryana are engaged in agricultural pursuits. Out of the total cultivable area of 37.38 lakh hectares in the state, 43.7 per cent is irrigated. The state is surplus in foodgrains, particularly wheat, rice, bajra, barley, gram and jowar. Other important crops are sugarcane, oilseeds and cotton. Production of foodgrains in 1973-74 was 38.36 lakh tonnes as against 40.73 lakh tonnes in 1972-73 as a result of drought conditions; production of sugarcane (gur) was 5.93 lakh tonnes in 1973-74 as against 5.60 lakh tonnes in 1972-73; production of cotton was 4.41 lakh bales in 1973-74 as against 4.23 lakh bales in 1973-74; production of oilseeds was 0.61 lakh tonnes in 1973-74.

Forests cover about 3.4 per cent of the state's area.

INDUSTRY

Some of the minerals found in small quantities are iron ore, limestone, china clay and marble. However, occurrence of graphite and quartzites has been reported at several places in the state.

The major industries are cement, sugar, paper, cotton textiles, glassware, brassware, cycles, tractors, motor cycles, time-pieces, automobile tyres and tubes, sanitaryware and canvas shoes. A factory of the central government undertaking, the Hindustan Machine Tools, which is producing tractors, is located at Pinjore.

IRRIGATION AND POWER

Haryana is a beneficiary of the major irrigation projects of Punjab and Rajasthan. The major irrigation projects of the state include the Western Yamuna Canal and the Gurgaon Canal. The total installed power capacity on 31 March 1975 was 552 mw from various hydel and thermal stations. This includes Haryana's share from Bhakra Nangal and Indraprastha satation extension project which are interlinked projects. Haryana is the first state in India to achieve 100 per cent rural electrification. By March 1971, all the 6,731 villages had been electrified whereas in 1951 not a single village had electricity. For irrigation, about 1,36,000 pumpsets/tube-wells had been energised by 1974-75 as against 743 in 1956.

GOVERNMENT

Governor[1]*:* B.N. Chakravarty

Council of Ministers[1]

Chief Minister: Banarsi Dass Gupta,
Cabinet Ministers: Kanhiya Lal Poswal, Ram Saran Chand Mittal, Harpal Singh, Maru Singh, Shyam Chand, Chiranji Lal, Maha Singh and Pekar Ram.
Ministers of State: Smt Sharda Rani, Smt Parsanni Devi, Goverdhan Dass, Harmohinder Singh Chatha and Surjeet Singh Mann.

Legislative Assembly[1]

Speaker: Sarup Singh
Deputy Speaker: Smt Lekhwati Jain

High Court[2]

Chief Justice: R.S. Narula
Judges: B.R. Tuli, Anand Dev Koshal, S.S. Sandhanwalia, P.C. Jain, M.S. Gujral, S.C. Mital, D.S. Tewatia, B.S. Dhillon, P.S. Pattar,

[1] As on 12 February 1975. [2] As on 1 June 1975. Haryana and Punjab have a common High Court.

M.L. Verma, Gurnam Singh, Mela Ram Sharma, R.N. Mittal, S.S. Sidhu, A.S. Bains and K.S. Tiwana.

Public Service Commission[1]

Chairman: Harphool Singh
Members: Braham Parkash Gupta and Ratti Ram Sharma

Chief Secretary: S.D. Bhambri

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[2]

	District	*Area (sq. km.)*	*Population (1971 census)*	*Headquarters*
1.	Hissar	6,339	11,27,525	Hissar
2.	Bhiwani	5,090	7,61,953	Bhiwani
3.	Gurgaon	4,889	13,72,197	Gurgaon
4.	Jind	3,311	7,72,111	Jind
5.	Mahendergarh	2,983	7,34,143	Narnaul
6.	Ambala	3,833	10,98,405	Ambala
7.	Karnal	3,725	9,88,437	Karnal
8.	Kurukshetra	3,738	8,62,899	Kurukshetra
9.	Rohtak	3,843	10,98,548	Rohtak
10.	Sonepat	2,200	6,86,986	Sonepat
11.	Sirsa	4,271	5,33,604	Sirsa

HIMACHAL PRADESH

Area: 55,673 sq. km	*Population:* 34,60,434
Capital: Simla	*Principal languages:* Hindi and Pahari

AGRICULTURE

Agriculture and horticulture are the mainstay of Himachal Pradesh's economy as 76 per cent of its people are engaged in these pursuits. Irrigated area forms only about 16.6 per cent of the net area sown. However, the agro-climatic conditions in the state are most suitable for growing a wide variety of fruits and cash crops like potato, ginger and vegetable seeds. Wheat, maize and rice are the major foodcrops. The production of foodgrains during 1973-74 was 9.9 lakh tonnes as against 9.5 lakh tonnes during 1972-73.

Besides apples, excellent variety of plums, peaches and apricots are also grown. The total fruit production during 1973-74 was about 2.4 lakh tonnes.

Forests occupy 38.3 per cent of the area of the state. About one-third of the total revenue is earned from this source. The main forest products include timber, fuel wood, gums and resin.

INDUSTRY

Important minerals of Himachal Pradesh are rock salt, slate, gypsum, limestone, barytes, dolomite and pyrites.

Though Himachal Pradesh is endowed with vast natural resources, cheap power and labour, a big hurdle in the way of industrialisation is that most of the area is not easily accessible. Among major industries are Nahan Foundry, rosin and turpentine factories at Nahan and Bilaspur in the public sector and a brewery at Solan in the private sector. A mini steel plant is being set up at Nalagarh. A cement factory has been set up at Rajban in Sirmaur district, while another is being set up at Dharmkot in Kangra district. In the small scale sector, microscopes, electric motors, watch parts, clinical and indus-

[1]As on 12 February 1976. [2]*Source*: State Government.

trial thermometers, mono block pumps, and hospital and heating equipments are being manufactured. Three re-rolling mills in Solan district have gone into production and another in Kangra district is being set up. A chemical unit, set up in the private sector in Sirmaur district, has gone into production.

Among the indigenous village industries are sheep rearing, wood carving and blacksmithy. To encourage industry, the Himachal Pradesh Mineral and Industrial Development Corporation, the State Small Industries and Export Corporation, the Khadi and Village Industries Board and the Handicrafts and Handloom Corporation have been set up.

IRRIGATION AND POWER

There are no major irrigation projects in the state. Among important power projects at present in hand are (i) Giri Bata project in Sirmaur district, (ii) Rukti micro hydel scheme in Kinnaur district, (iii) Sissu micro hydel scheme in Lahul and Spiti district, (iv) Baggi augmentation project in Mandi district, and (v) Bhaba hydel project in Kinnaur district.

Up to October 1974, 4,682 villages out of a total of 16,916 had been electrified and 1,148 pumpsets energised.

GOVERNMENT

Governor: S. Chakravarti

Council of Ministers[1]

Chief Minister: Y.S. Parmar
Cabinet Ministers: Ram Lal, Des Raj Mahajan and Lal Chand Prarthi
Ministers of State: Hardyal, Mansa Ram and Smt Sarla Sharma.
Chief Parliamentary Secretary: Babu Ram Mandial
Parliamentary Secretary: Kishori Lal Tadu

Legislative Assembly[1]

Speaker: Kultar Chand Rana
Deputy Speaker: Lekh Ram

High Court[2]

Chief Justice: R.S. Pathak
Judges: D.B. Lal and Chet Ram Thakur

Public Service Commission[1]

Chairman: I.C. Katoch
Member: Krishan Swaroop

Chief Secretary: U.N. Sharma

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[3]

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Bilaspur	1,200	1,94,786	Bilaspur
2.	Chamba	8,200	2,55,233	Chamba
3.	Hamirpur	1,600	2,65,011	Hamirpur
4.	Kangra	5,300	8,00,863	Dharmsala
5.	Kinnaur	6,600	49,835	Kalpa
6.	Kulu	5,400	1,92,371	Kulu
7.	Lahul Spiti	12,000	23,538	Keylong
8.	Mandi	4,000	5,15,180	Mandi
9.	Simla	5,000	4,19,844	Simla
10.	Sirmur	2,800	2,45,033	Nahan
11.	Solan	2,100	2,37,403	Solan
12.	Una	1,500	2,61,337	Una

[1] As on 15 October 1975. [2] As on 1 June 1975. [3] *Source:* State Government.

JAMMU AND KASHMIR

Area: 2,22,236 sq. km[1]	*Population*: 46:16,632[2]
Capital: Srinagar (summer) Jammu (winter)	*Principal languages*: Kashmiri, Dogri, Gojri, Urdu, Balti. Dardiro Pahari and Ladakhi

AGRICULTURE

The economy of Jammu and Kashmir is largely agrarian. More than 80 per cent of the population depends on agriculture for its livelihood. The total area under cultivation is 8.67 lakh hectares of which 3.23 lakh hectares are irrigated. Main crops are rice, maize, wheat and barley. Production of foodgrains in 1974-75 has been estimated at 9.88 lakh tonnes. The area under high yielding varieties increased from 3.00 lakh hectares in 1973-74 to 3.08 lakh hectares in 1974-75. Horticulture has made considerable progress in recent years; the area under it in 1974-75 was 66,000 hectares as against 30,000 hectares in1950-51. Production of fruits was 2.16 lakh tonnes in 1973-74 as against 1.83 lakh tonnes in 1972.73. Export of fruits was 1.86 lakh tonnes in 1973-74 as against 1.55 lakh tonnes in 1972-73.

INDUSTRY

Sericulture is a major industry. Production of raw silk increased from 19.22 lakh kg in 1972-73 to 22.39 lakh kg in 1973-74. Among the other industries which have come up in the state are the HMT watch factory and an ancillary unit of the Indian Telephone Industries, both at Srinagar.

Main cottage industries are carpet and shawl making, engraved carpentry and handicrafts. Nearly 80,000 persons are engaged in traditional handicrafts.

IRRIGATION AND POWER

Major irrigation schemes already completed are Kathua canal and Pratap canal which irrigate an area of 17,140 hectares. Under the Tawi lift irrigation scheme, which was completed in 1973-74, part benefits have already started accruing. The scheme is designed to irrigate 13,480 hectares.

Important power schemes implemented since 1947 are the Ganderbal (15 mw), Chenani (15 mw) and Kalakot (22.5 mw). The power-projects under implementation include Upper Sind project and Lower Jhelum hydel project. Besides, work on Salal hydro-electric project is also in progress.

The total installed capacity on 31 March 1975 was 99 mw. With the commissioning of the high voltage transmission lines between Srinagar and Pathankot in 1974, the power supply system in the Valley is linked with that of northern India.

The number of villages electrified by the end of 1973-74 was 1,412 as compared to nil in 1951.

GOVERNMENT

Governor: L.K. Jha

Council of Ministers[3]

Chief Minister : Sheikh Mohammad Abdullah
Cabinet Ministers : Mirza Mohammad Afzal Beg, Devi Dass Thakur and Sonam Narboo.

[1] Includes area under the illegal occupation of Pakistan and China.
[2] Excludes population of area under the illegal occupation of Pakistan and China.
[3] As on 10 October 1975.

Ministers of State : Kachu Mohammad Ali, Ch. Mohammad Aslam, Ghulam Nabi Kochak, Bhagat Chaju Ram, Mangat Ram, Ghulam Mohammad Shah, Rangil Singh, Attaullah Soharwardy, Mohan Krishan Tiku, Hakim Habibullah and Smt Zainab Begum.

Legislative Council[1]
Chairman: Syed Hussain
Deputy Chairman: Sardar Gurmukh Singh

Legislative Assembly[1]
Speaker: Abdul Gani Goni
Deputy Speaker: Beli Ram

High Court[2]
Chief Justice: Jaswant Singh
Judges: Mian Jalal-ud-din and M.Baha-ud-Din Farouqui.
Additional Judge: Adarsh Sein Anand

Public Service Commission[1]
Chairman: Amar Singh
Members: Dwarka Nath, A.S. Dar, A.A. Aftab and Mohammad Amin.

Chief Secretary: S. Banerji

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Anantnag (Kashmir South)	5,382	8,32,280	Anantnag
2.	Baramula (Kashmir North)	7,458	7,75,724	Baramula
3.	Doda	11,691	3,42,220	Doda
4.	Jammu	3,165	7,31,743	Jammu
5.	Kathua	2,651	2,74,671	Kathua
6.	Ladakh	95,876[3]	1,05,291	Leh
7.	Punch	1,658	1,70,787	Punch
8.	Rajauri	2,681	2,17,373	Rajauri
9.	Srinagar	3,013	8,27,697	Srinagar
10.	Udhampur	4,549	3,38,846	Udhampur

KARNATAKA

Area: 1,91,773 sq. km	*Population*: 2,92,99,014
Capital: Bangalore	*Principal language*: Kannada

AGRICULTURE

Karnataka is predominantly agricultural. Of the total cultivated area of 104 lakh hectares, 13.14 per cent is irrigated. Major food crops are rice, ragi, jowar, wheat, millets and pulses. The main cash crops are sugarcane, cotton, oilseeds, tobacco, coconut, arecanut, coffee, cashew, cardamom, pepper, oranges and grapes. Production of foodgrains during 1974-75 was 62 lakh tonnes, sugarcane 92 lakh tonnes, oilseeds 7.25 lakh tonnes, cotton 6.2 lakh bales and tobacco 18,000 tonnes.

Forests cover 15.20 per cent of the area of the state. High quality timber, sandalwood, eucalyptus, teakwood and bamboo are the major forest products. Other forest products are high quality rosewood, softwood suitable for industrial purposes, and other valuable timbers.

[1] As on 10 October 1975.
[2] As on 1 June 1975.
[3] Includes area under the illegal occupation of China.

INDUSTRY

The state is rich in mineral resources. Important among them are high grade iron ore, managanese, chromite and china clay. Karnataka is the only state where gold mining is carried on. There are a number of big industries. Machine tools, aircraft, electronic products ,watches and telecommunication equipment are some of the items produced. Important Government of India undertakings engaged in the production of these items are HAL, HMT, BEL, and ITI. The State-owned Mysore Iron & Steel Ltd. Bhadravati, produces sepcial steel and alloy steel with a rated capacity of 77,000 tonnes annually. Other flourishing industries are textiles, sugar, soap, chemical and pharmaceutical goods, cement, glass, ceramics and porcelain.

Karnataka accounts for 80 per cent of the mulberry silk produced in the country. Apart from silk, its sandal soap and sandal oil are well known in world markets.

IRRIGATION AND POWER

Karnataka has two large river basins, those of Krishna and Cauvery, besides a number of other rivers used both for irrigation and power generation. The important irrigation schemes are Tungabhadra, Ghataprabha, Malaprabha, Upper Krishna, Bhadra, Harangi, Kabini and Hemavathi.

The major power projects are Sharavati hydro-electric project, Shivasamudram hydro-electric project and the power project on Kali river now under construction. The installed power capacity was 967 mw on 31 March 1974. The number of electrified villages stood at 17,500 at the end of March 1974 as compared to 551 in 1951. For irrigation, 2,07,066 tube-wells had been energised by 31 March 1975.

GOVERNMENT

Governor: Uma Shankar Dikshit

Council of Ministers[1]

Chief Minister: D. Devraj Urs
Cabinet Ministers: M. Mallikarjunaswamy, N. Hutchmasthy Gowda, H.M. Channabasappa, H. Siddaveerappa, Mohammed Ali, M.Y. Ghorpade, S.M. Krishna, D.K. Naikar, K.N. Ranganath, N. Chikke Gowda, N. Rachaiah, S.M. Yahya, C.N. Patil and Smt Eva Vaz.
Ministers of State: K.T. Rathod, S.B. Nagaral, V.S. Kaujalgi, Devendrappa Ghalappa, R.D. Kittur, Subhash Asture, K. Sriramulu, R. Gundu Rao, Veerappa Moily, Smt Manorama Madhwaraj, Subbaiah Shetty and H.C. Srikantaiah.

Legislative Council[1]

Chairman: M.V. Venkatappa
Deputy Chairman: T. N. Narasimha Murthy

Legislative Assembly[1]

Speaker: Smt K.S. Nagarathnamma
Deputy Speaker: B.P. Kadam

High Court[2]

Chief Justice: G.K. Govinda Bhat
Judges: D.M. Chandrashekhar, Closepet Honniah, Koratagere Bhimiah, Byanna Venkataswami, M. Sadananda Swamy, D. Noronha, V.S. Malimath, S.R. Range Gowda, E.S. Venkataramaiah, K. Jagannatha Shetty, M.S. Nesargi and M.K. Srinivasa Iyengar.

Public Service Commission[1]

Chairman: G. Duggappa
Members: H.L. Nage Gowda, S. Obeidulla, A.B. Mariyappa, B.P. Mallaraj Urs, H. Maharudraiah and B.T. Sasnur.

Chief Secretary: G.V.K. Rao

[1] As on 15 October 1975. [2] As on 1 June 1975.

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	Area (sq. km)	Population (1971 census)	Headquarters
1.	Bangalore	8,003	33,65,515	Bangalore
2.	Belgaum	13,410	24,23,342	Belgaum
3.	Bellary	9,898	11,22,686	Bellary
4.	Bidar	5,451	8,24,059	Bidar
5.	Bijapur	17,056	19,85,591	Bijapur
6.	Chikmagalur	7,199	7,36,647	Chikmagalur
7.	Chitradurga	10,852	13,97,456	Chitradurga
8.	Coorg	4,104	3,78,291	Mercara
9.	Dharwar	13,749	23,42,213	Dharwar
10.	Gulbarga	16,224	17,39,220	Gulbarga
11.	Hassan	6,823	11,02,370	Hassan
12.	Kolar	8,223	15,16,646	Kolar
13.	Mandya	4,958	11,54,374	Mandya
14.	Mysore	11,947	20,77,238	Mysore
15.	North Kanara	10,276	8,49,105	Karwar
16.	Raichur	14,005	14,15,740	Raichur
17.	Shimoga	10,548	13,01,485	Shimoga
18.	South Kanara	8,441	19,39,315	Mangalore
19.	Tumkur	10,606	16,27,721	Tumkur

KERALA

Area: 38,864 sq. km	*Population*: 2,13,47,375
Capital: Trivandrum	*Principal language*: Malayalam

AGRICULTURE

Irrigated area forms 20.2 per cent of the total cultivated area in Kerala. The state has abundance of cash crops. Cashew-nut, areca-nut coconut, cotton, oilseeds, pepper, sugarcane, rubber, coffee, tea and cardamom are grown extensively. Rice and tapioca are important food crops grown, though pulses are also grown in some areas. Production of rice was 12.57 lakh tonnes in 1973-74 as against 13.76 lakh tonnes in 1972-73. The corresponding figures for rubber were 1.18 lakh tonnes and 92,000 tonnes and for cardamom 1,502 tonnes and 1,250 tonnes.

Forests occupy 24 per cent of the area of the state. The forest wealth consists of some well-known varieties of timber, such as, teak, blackwood, ebony, softwood and rosewood which are in great demand abroad and fetch a high price. A State Forest Development Corporation has been formed to undertake a scheme of raising plantations such as eucalyptus and soft wood required for various wood-based industries.

INDUSTRY

Important minerals found in the state are ilmenite, rutile, monazite, zircon, sillimanite and clays, quartz sand and lime shell.

Important industries are coir, cashew, rubber, tea, ceramics, electrical appliances, telephone cables, transformers, bricks and tiles, drugs and chemicals, soaps, oils and fertilizers.

In recent years, a number of manufacturing units have sprung up for producing precision instruments, machine tools, petroleum and petroleum products, fertilizers and allied products, paints, aluminium, communication cables, rubber, rayon, pulp, paper, plywood, glass and non-ferrous metals.

Principal export products are cashew-nut, tea, pepper and other spices, lemon grass oil, seafoods, particularly shrimps, rosewood, coir and coir products and rubber products. The export of marine products alone fetched foreign exchange to the tune of Rs 57.80 crores during 1973-74.

The Kerala State Industrial Development Corporation and Kerala Financial Corporation provide financial assistance to private industries while the Plantation Corporation of Kerala has undertaken large scale expansion of rubber and oilpalm plantations.

IRRIGATION AND POWER

Major irrigation projects implemented since 1947 are Periyar Valley, Neyyar, Meenkara, Kanhirapuzha, Kuttiadi, Malampuzha and Peechi. Important power projects are Panniar, Sholayar, Sabarigiri, Sengulam, Poringalkuth, Neriamangalam and Idukki.

Heavy rainfall and a large number of swift flowing rivers and streams provide considerable potential for power generation. The total installed capacity in March 1974 was 621.5 mw from various hydel stations. There were only 159 electrified villages in 1951; the number increased to 1,375 during 1973-74. For irrigation, 33,270 pumpsets/tube-wells had been energised by 31 March 1973 as compared to 2,666 in 1961.

GOVERNMENT

Governor: N.N. Wanchoo

Council of Ministers[1]

Chief Minister: C. Achutha Menon
Cabinet Ministers: K. Karunakaran, K.G. Adiyodi, K. Avukaderkutty Naha, Baby John, N.K. Balakrishnan, R. Balakrishna Pillai, Chakkeri Ahmed Kutty, V. Eacharan, M.N. Govindan Nair, Paul P. Mani, K.M. Mani, Vakkom B. Purushothaman and T.V. Thomas.

Legislative Assembly[2]

Speaker: *Vacant*
Deputy Speaker: R.S. Unni

High Court[3]

Chief Justice: P. Govindan Nair
Judges: V.P. Gopalan Nambyar, V.B. Eradi, P. Narayana Pillai, P.S. Poti, N.D.P. Namboodiripad, G. Vishwanatha Iyer, V. Khalid, K. Bhaskaran, George Abraham Vadakkel, T.C. Menon, Kum. P. Janaki Amma and K.K. Narendran.

Additional Judges: G.B. Nair, S.K. Kadar and T.K. Thommen.

Public Service Commission[3]

Chairman: T.M. Savan Kutty
Members: N. Ramachandran, Thirunellur Karunakaran, E.P. Antony, K.V. Kunhikrishna Poduval, T.P. Joseph and K.A. Narayanan.

Chief Secretary: K.P.K. Menon

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[4]

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Alleppey	1,884	21,26,000	Alleppey
2.	Cannanore	5,706	23,65,000	Cannanore
3.	Ernakulam	2,377	21,64,000	Ernakulam
4.	Idukki	5,087	7,66,000	Idukki (Temporary at Kottayam)
5.	Kottayam	2,196	15,39,000	Kottayam
6.	Kozhikode	3,729	21,06,000	Kozhikode
7.	Malappuram	3,638	18,56,000	Malappuram
8.	Palghat	4,400	16,85,000	Palghat
9.	Quilon	4,623	24,13,000	Quilon
10.	Trichur	3,032	21,29,000	Trichur
11.	Trivandrum	2,192	21,99,000	Trivandrum

[1]As on 1 February 1976.
[2]As on 1 June 1975.
[3]As on 15 October 1975.
[4]*Source*: State Government.

MADHYA PRADESH

Area: 4,42,841 sq. km	*Population:* 4,16,54,119
Capital: Bhopal	*Principal language:* Hindi

AGRICULTURE

The economy of Madhya Pradesh is agriculture-based. Nearly 84 per cent of the population lives in villages but only about 37.3 per cent of them are economically active. Most of the agricultural area is rain-fed, the irrigated area being only 10 per cent of the total cultivated area. The cultivated area is over 35 per cent. The state is surplus in foodgrains and commercial crops. The main food crops are jowar, wheat, rice and gram. Important among the commercial crops are oilseeds, cotton and sugarcane. The production of foodgrains was 1.16 crore tonnes in 1973-74 as compared to 47 lakh tonnes in 1951. The production of sugarcane and oilseeds was 1.25 and 5.96 lakh tonnes respectively during 1973-74. During the same period, the production of cotton was 1.88 lakh tonnes.

Forests cover nearly 30 per cent of the total area of the state.

INDUSTRY

The south-eastern and eastern areas of the state are rich in minerals. Coal, iron ore, limestone, dolomite, bauxite, diamond and manganese ore are the principal deposits.

The major industries established in various parts of the state are the steel plant at Bhilai, the Bharat Heavy Electricals at Bhopal and the aluminium plant at Korba. There are 19 textile mills in the state. The country's only newsprint mill is located at Nepanagar in the state. The estimated production of the mill during 1974-75 was about 55,000 tonnes. Other industries include potteries, cement, biscuit manufacturing, engineering tools, rayon and art silk. Thirty-six out of forty-five districts in the state are categorised as industrially backward districts.

IRRIGATION AND POWER

Important irrigation projects of Madhya Pradesh are Chambal, Tawa, Hasdeo, Mahanadi and Barna. Twenty-nine medium irrigation projects were completed during the first three five year plans bringing nearly 7,28,460 hectares of additional area under irrigation. Two medium projects—Bila in Sagar and Chhapi in Raigarh—and Chandrakeshwar in Dewas, partially completed, have created an additional irrigation potential of 22,663 hectares. Madhya Pradesh has good potential of hydro-electric power generation. The total installed capacity of power, both hydel and thermal, by the end of 1973-74 was estimated to be 769 mw. Madhya Pradesh had only nine electrified villages in 1951 and the number increased to nearly 11,000 by the end of 1974-75. The total number of irrigation pumps energised was 1.6 lakhs up to March 1974 as compared to only 30 in 1956.

GOVERNMENT

Governor: Satya Narayan Sinha

Council of Ministers[1]

Chief Minister: S.C. Shukla

Cabinet Ministers: S.S.N. Mushran, Mathura Prasad Dube, V.R. Uike, Paramanand Bhai Patel, K.P. Singh, Tejlal Tembhre, Gulab Chand Tamot, Umrao Singh, B.P.S. Komakhan, S.B. Solanki and Shridhar Mishra.

Ministers of State: Ram Chandra Singhdeo, Smt. Sushila Dikshit,

[1]As on 8 March 1976.

Pyarelal, Madhavlal Dube, Aziz Qureshi, Narayan Prasad Shukla, Rajendra Singh.
Deputy Ministers: Chandra Prabhash Shekhar, Kishanlal Kurre, Bhawanilal Verma.

Legislative Assembly[1]
Speaker: Gulsher Ahmed
Deputy Speaker: N.P. Shukla

High Court[2]
Chief Justice: P.K. Tare
Judges: S.P. Shrivastava, R.J. Bhave, A.P. Sen, G.P. Singh, S.M. N. Raina, G.J. Oza, S.R. Vyas, K.K. Dube, N.C. Dwivedi, R.K. Tankha, J.S. Verma, G.G. Sohani, M.L. Malik, R.L. Murab, B.R. Dube, U.N. Bachawat, C.P. Sen and S.S. Sharma.

Public Service Commission[1]
Chairman: K.N. Sinha
Members: D.D. Kurre, R.K. Singh and Ram Biharilal.

Chief Secretary: T.C.A. Srinivasavaradan

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[3]

District	Area (sq. km)	Population (1971 census)	Headquarters
1. Balaghat	9,245	9,77,583	Balaghat
2. Bastar	39,060	15,15,956	Jagdalpur
3. Betul	10,061	7,36,196	Betul
4. Bhind	4,467	7,93,955	Bhind
5. Bilaspur	19,905	24,40,962	Bilaspur
6. Chhatarpur	8,690	7,12,385	Chhatarpur
7. Chhindwara	11,824	9,89,413	Chhindwara
8. Damoh	7,301	5,73,263	Damoh
9. Datia	2,034	2,55,267	Datia
10. Dewas	7,014	5,94,336	Dewas
11. Dhar	8,149	8,42,400	Dhar
12. Durg	19,670	24,61,901	Durg
13. East Nimar	10,705	8,79,331	Khandwa
14. Guna	11,017	7,83,748	Guna
15. Gwalior	5,213	8,58,005	Gwalior
16. Hoshangabad	10,016	8,05,870	Hoshangabad
17. Indore	3,910	10,25,150	Indore
18. Jabalpur	10,164	16,86,030	Jabalpur
19. Jhabua	6,781	6,67,811	Jhabua
20. Mandsaur	9,726	9,61,522	Mandsaur
21. Mandla	13,257	8,73,577	Mandla
22. Morena	11,586	9,85,338	Morena
23. Narsimhapur	5,138	5,19,270	Narsimhapur
24. Panna	7,122	4,29,077	Panna
25. Raigarh	12,910	12,78,705	Raigarh
26. Raipur	21,251	26,13,531	Raipur
27. Raisen	8,395	5,53,026	Raisen
28. Rajgarh	6,163	6,44,346	Rajgarh
29. Ratlam	4,859	6,26,534	Ratlam
30. Rewa	6,315	9,77,894	Rewa
31. Sagar	10,246	10,62,291	Sagar
32. Satna	7,495	9,13,531	Satna
33. Sehore	9,015	10,84,933	Sehore
34. Seoni	8,752	6,68,352	Seoni
35. Shahdol	14,028	10,29,839	Shahdol
36. Shajapur	6,201	6,78,359	Shajapur
37. Shivpuri	10,285	6,76,567	Shivpuri
38. Sidhi	10,532	7,76,786	Sidhi
39. Surguja	22,337	13,26,439	Ambikapur
40. Tikamgarh	5,047	5,68,885	Tikamgarh
41. Ujjain	6,081	8,62,516	Ujjain
42. Vidisha	7,433	6,58,427	Vidisha
43. West Nimar	13,441	12,84,812	Khargone
44. Bhopal	2,763	5,72,169	Bhopal
45. Rajnandgaon	11,003	9,92,774	Rajnandgaon

[1]As on 2 June 1975. [2]As on 1 June 1975. [3]*Source:* State Government.

MAHARASHTRA

Area: 3,07,762 sq. km	*Population:* 5,04,12,235
Capital: Bombay	*Principal language:* Marathi

AGRICULTURE

About 70 per cent of the people in Maharashtra depend on agriculture. Irrigated area forms only about 9 per cent of the total cropped area. The principal food crops are wheat, rice, jowar, maize, bajra and pulses. Production of foodgrains during 1974-75 totalled 77.6 lakh tonnes. Important cash crops are cotton, oilseeds, sugarcane, groundnut and tobacco and their production during 1974-75 was: sugarcane (gur) 15.50 lakh tonnes, cotton 12.5 lakh bales; and groundnut 4.9 lakh tonnes.

Of the total area, forests occupy 17.5 per cent.

INDUSTRY

Maharashtra is endowed with sizeable deposits of iron ore, coal, manganese ore, bauxite and limestone. Manganese ore in the Vidarbha region has enabled the state to develop ferro-manganese industry. A cement factory has been set up at Chandrapur.

There are several large-scale industries including textiles, ginning and pressing, silk, rayon, synthetic fabrics and vegetable products. Most of the textile mills are located in Bombay. Maharashtra is also a major sugar-producing state. Important chemical industries include nitrogenous fertilizers, superphosphates, chemicals, drugs and pharmaceuticals and photographic chemicals.

Various types of engineering goods, such as, machine tools, steel and malleable iron castings, welding electrodes, ball-bearings and agricultural implements are manufactured for domestic consumption as well as for export. Maharashtra leads in the motion picture industry which plays a vital role in the economy of the state. A number of defence and public sector industries are also located in the state.

IRRIGATION AND POWER

Important irrigation schemes implemented since 1947 include Jayakwadi, Gangapur, Ghod, Girna, Khadakvasla (Panshet), Mula, Vir, Purna, Manar, Bagh, Itiadoh, Bor, Nalganga and Katepurna projects.

The major power projects are Koyna, Purna, Trombay, Nasik and Koradi. The total installed capacity in March 1975 was 2,262 mw. This includes the capacity of the atomic power station functioning at Tarapur since 1969. Maharashtra had only 38 electrified villages in 1951; the number increased to 19,515 by March 1975. For irrigation 3,80,844 pumpsets/tube-wells had been energised by 31 March 1975 compared to 142 in 1951.

GOVERNMENT

Governor: Ali Yawar Jung

Council of Ministers[1]

Chief Minister: S.B. Chavan

Cabinit Ministers: N.M. Tidke, Rafiq Zakaria, Y.J. Mohite, Smt. Pratibha Patil, S.B. Patil, S.A. Solanke, S.G. Pawar, R.J. Deotale, Ratnappa Kumbhar, Smt. Prabha Rao, B.J. Khatal, K.M. Patil, A.S. Kasture.

Ministers of State: P.K. Kunte, U.N. Gaikwad, R.P. Valvi, R.M. Pande, S.S. Shinde, N.S. Sapkal, Jagesh Desai, J. Leon D'Souza, R.V. Bet, V.G. Prabhugaonkar, Shamrao Kadam, Sangram Suryavanshi,

[1] As on 9 March 1976.

Deputy Ministers: Baburao Kale, Shivraj Patil, S.G. Gholap, A.H. Mamdani, D.D. Chavan.

Legislative Council[1]

Chairman: V.S. Page
Deputy Chairman: R.S. Gavai

Legislative Assembly[1]

Speaker: S.K. Wankhede
Deputy Speaker: Farooq Pasha

High Court[2]

Chief Justice: R.M. Kantawala
Judges: V.D. Tulzapurkar, B.N. Deshmukh, J.R. Vimadalal, V.S. Deshpande, D.P. Madon, M.N. Chandurkar, M.S. Apte, G.N. Vaidya, N.D. Kamat, S.B. Bhasme, M.H. Kania, S.K. Desai, S.M. Hajarnavis, R.K. Joshi, B.A. Masodkar, C.S. Dharmadhikari, P.M. Mukhi, P.S. Shah, B.M. Sapre, N.B. Naik, D.M. Rege, J.M. Gandhi, R.L. Agarwal, B. Lentin and P.B. Sawant.
Additional Judges: A.R. Shimpi, R.P. Bhatt, U.R. Lalit and C.T. Dighe.

Public Service Commission[3]

Chairman: N.N. Wankhade
Members: S.N.A. Razvi, K.G. Deshmukh, M.G. Mane, and D.J. Jadhao.

Chief Secretary: D.D. Sathe

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Ahmadnagar	17,035	22,69,117	Ahmadnagar
2.	Akola	10,567	15,01,478	Akola
3.	Amravati	12,210	15,41,209	Amravati
4.	Aurangabad	16,200	19,71,006	Aurangabad
5.	Bhandara	9,214	15,85,580	Bhandara
6.	Bhir	11,227	12,86,121	Bhir
7.	Buldhana	9,745	12,62,978	Buldhana
8.	Chandrapur	25,641	16,40,137	Chandrapur
9.	Dhulia	13,143	16,62,181	Dhulia
10.	Greater Bombay	603	59,70,575	Bombay
11.	Jalgaon	11,771	21,23,121	Jalgaon
12.	Kolaba	7,198	12,63,003	Alibagh
13.	Kolhapur	8,059	20,48,049	Kolhapur
14.	Nagpur	9,928	19,42,688	Nagpur
15.	Nanded	10,492	13,97,762	Nanded
16.	Nasik	15,582	23,69,221	Nasik
17.	Osmanabad	14,117	18,96,687	Osmanabad
18.	Parbhani	12,489	15,06,771	Parbhani
19.	Pune	15,640	31,78,029	Pune
20.	Ratnagiri	13,040	19,90,583	Ratnagiri
21.	Sangli	8,563	15,39,820	Sangli
22.	Satara	10,492	17,27,376	Satara
23.	Sholapur	15,021	22,53,840	Sholapur
24.	Thana	9,553	22,81,664	Thana
25.	Wardha	6,307	7,79,562	Wardha
26.	Yeotmal	13,925	14,23,677	Yeotmal

[1] As on 13 March 1976.
[2] As on 1 June 1975.
[3] As on 15 October 1975.

MANIPUR

Area: 22,356 sq. km	*Population:* 10,72,753
Capital: Imphal	*Principal language:* Manipuri

AGRICULTURE

The main occupation of 66 per cent of the population of Manipur is agriculture. Nearly 92 per cent of the total land area is hilly and covered with forests. Forest reserves are being developed by planting better species of timber. Bamboo is found in large quantities. In the Jeri and Barak river drainage area alone, bamboos cover an estimated area of 2,585 sq. km yielding 3,00,000 tonnes annually. Main crop is paddy, while wheat and maize are also grown in some areas. Orchards are also being set up. The production of food-grains increased from 1.75 lakh tonnes in 1972-73 to an estimated 1.98 lakh tonnes in 1973-74.

INDUSTRY

The state has no large-scale industry. Handloom weaving is the largest single cottage industry. Other cottage industries are sericulture, bamboo and cane articles, carpentry, blacksmithy, leather goods, edible oil crushing, rice milling and gur and khandsari.

To accelerate the development of small scale industries an industrial advisory board has been set up and the jurisdiction of Assam Financial Corporation extended to Manipur. At Takyelpat near Imphal, an industrial estate is being set up.

IRRIGATION AND POWER

Irrigation is done through minor irrigation works by constructing weirs across running streams for better distribution of water during the monsoons.

Loktak is the only major power project in the state. The total installed capacity of power, both hydel and thermal, in 1973-74 was 7.6 mw. Manipur had only nine electrified villages before 1951; the number increased to 217 by 31 March 1975.

GOVERNMENT

Governor: L.P. Singh

Council of Ministers[1]

Chief Minister: R.K. Dorendra Singh
Cabinet Ministers: Sinam Bijoy Singh, Rishang Keishing, R.K. Ranbir Singh, T. P. Kinlengpou, M. Meghachandra Singh and N. Gouzagin.
Ministers of State: Holkhomang Haokip, R.K. Thekho, H.T. Thungam, Ashraf Ali, M. Gouramani Singh, M. Ibotombi Singh, Kh. Rotho Singh, Kh. Nimaichand Singh, S. Biramani Singh.

Legislative Assembly[1]

Speaker: L. Chandramani Singh
Deputy Speaker: Ngurdinglen

High Court

The jurisdiction of Gauhati High Court extends over Manipur. For list of judges, see under Assam.

Public Service Commission[1]

Chairman: D. Krishna Ayaar
Members: S. Larho and K. Gourakishore Singh

Chief Secretary: H.S. Butalia

[1] As on 31 January 1976.

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Manipur Central	5,605	7,63,260	Imphal
2.	Manipur East	4,409	62,229	Ukhrul
3.	Manipur North	3,417	1,04,175	Karong
4.	Manipur South	4,581	98,114	Churachandpur
5.	Manipur West	4,344	44,975	Tamenglong

MEGHALAYA

Area: 22,489 sq. km[1]
Capital: Shillong
Population: 10,11,699
Principal languages: Khasi, Jaintia and Garo

AGRICULTURE

Over 80 per cent of the people of Meghalaya are engaged in agricultural pursuits. Irrigated area is about 27 per cent of the cultivated area. The principal crops are potato, *tezpata*, sugarcane, oilseeds, cotton, jute, *mesta*, tobacco and areca-nut. Selected areas have been earmarked for growing high-yielding varieties of paddy, wheat and maize. In the Khasi and Jaintia Hills districts, fruits and vegetables are also grown and special programmes have been undertaken to develop horticulture. The production of foodgrains is around 1,30,000 tonnes annually. The annual production of cash crops is estimated to be: jute 50,000 bales, potato 71,000 tonnes and tapioca 5,000 tonnes. The state is making good progress in horticulture. It produces about 70,000 tonnes of pineapples, 80,000 tonnes of oranges and 35,000 tonnes of bananas annually.

Forests and forest products are the chief resources of the state. Economic plantations of industrial and commercial use are being undertaken extensively.

INDUSTRY

The mineral wealth of the Khasi and Jaintia Hills districts includes coal, sillimanite, limestone, white clay and corundum. Ninety-five per cent of India's total output of sillimanite is produced in these districts. The Garo Hills district has deposits of coal, limestone, fire clay and light coloured sandstone. The estimated reserves of coal in the state are about 12,000 lakh tonnes, limestone 21,000 lakh tonnes and clay 100 lakh tonnes.

The factory at Cherrapunjee produces 250 tonnes of cement every day and its capacity is being expanded to 950 tonnes a day. A timber treatment plant is being set up at Darugiri in Garo Hills. Several mineral-based industries are coming up. A plywood factory and a beverages factory have already been set up.

IRRIGATION AND POWER

Installed capacity of power in 1973 was 56 mw. The state had electrified 139 villages up to 1973-74. The area under minor irrigation has increased form 1,494 hectares in 1970-71 to 2,500 hectares in 1974-75.

GOVERNMENT

Governor: L.P. Singh

Council of Ministers[2]

Chief Minister: W.A. Sangma
Cabinet Ministers: B.B. Lyngdoh, Stanley D.D. Nichols Roy,

[1] As re-organised on 21 January 1972 according to North Eastern Areas (Re-organisation) Act, 1971. [2] As on 6 March 1976.

Edwinson Bareh, Sandford K. Marak, Darwin D. Pugh, Grohon Singh Marak and P.R. Kyndiah.
Ministers of State: P.G. Marbaniang, Salseng C. Marak and B.B. Shallam.

Legislative Assembly[1]

Speaker: R.S. Lyndgdoh
Deputy Speaker: Singjan Sangma

High Court

The jurisdiction of Gauhati High Court extends over Meghalaya. For list of judges, see under Assam.

Public Service Commission[2]

Chairman: Godwin Clinton Momin
Member: Owenton Roy Thangkhiew

Chief Secretary: N.K. Rustomji

Area, Population and Headquarters of Districts

District	Area (sq. km)	Population (1971 census)	Headquarters
1. Garo Hills	8,084	4,06,615	Tura
2. Jaintia Hills	3,863	6,05,084	Jowai
3. Khasi Hills	10,529		
4. Shillong	13		

NAGALAND

Area: 16,527 sq. km *Population:* 5,16,449
Capital: Kohima

AGRICULTURE

Agriculture is the main occupation of 90 per cent of the population of Nagaland. Rice is the only important foodgrain grown in the state. The total production of rice was 60,820 tonnes in 1973-74 as against 90,000 tonnes in 1972-73. The total cropped area under rice in 1973-74 was 63,000 hectares.

Forests cover 17.56 per cent of the area of the state and they contribute considerably to the revenues.

INDUSTRY

While there is no major industry in the state a sugar mill and a paper mill are being set up. Handloom and sericulture are the important cottage industries. There are six weaving-*cum*-production centres, three cottage industries-*cum*-production centres, five sericulture farms, one handicraft training-*cum*-production centre and three small-scale industries service centres.

IRRIGATION AND POWER

Minor irrigation works in the state are mostly meant to divert small hill streamlets to irrigate the valleys used for rice cultivation.

Total installed capacity of power in 1973-74 was 2.1 mw. Out of 814 villages in Nagaland, the number of electrified villages on 31 December 1974 was 158 compared to nil in 1951.

GOVERNMENT

Governor: L.P. Singh
Nagaland came under President's rule on 22 March 1975 and the Legislative Assembly was dissolved on 20 May 1975.

[1]As on 6 March 1976. [2]As on 7 August 1975.

High Court The jurisdiction of Gauhati High Court extends over Nagaland. For list of judges, see under Assam.

Public Service Commission[1] *Chairman:* L.M. Bhatia
Member: L. Medom

Chief Secretary: H. Zopianga

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[2]

District	Area (sq. km)	Population (1971 census)	Headquarters
1. Kohima	7,209	1,75,204	Kohima
2. Mokokchung	3,852	1,68,242	Mokokchung
3. Tuensang	5,466	1,73,003	Tuensang

ORISSA

Area: 1,55,782 sq. km	*Population:* 2,19,44,615
Capital: Bhubaneswar	*Principal language:* Oriya

AGRICULTURE Over 80 per cent of the people in Orissa are dependent on agriculture. Out of the total cropped area of 69.35 lakh hectares, 13.90 lakh hectares are irrigated. Rice is the most important crop and the state contributes about one-tenth of the rice produced in India. Other important crops are pulses, oilseeds, jute, *mesta*, sugarcane, coconut and turmeric. During 1974-75, the production of foodgrains was about 42 lakh tonnes: rice 33.5 lakh tonnes; wheat one lakh tonne; sugarcane 2.65 lakh tonnes; oilseeds 2.5 lakh tonnes and jute 3.3 lakh bales.

Forests cover 67.46 lakh hectares or 43 per cent of the area of the state. Main forest products are *sal*, teak, asan, *kurum*, peasal, bamboo and *kendu* leaves. Lac, tusser and medicinal plants like nux vomica and rauwolfia serpentina are available from certain forests. Seeds of *sal*, available in abundance, have recently become an economic product of the forests. *Kendu* leaf trade has been nationalised.

INDUSTRY Orissa is a leading producer of iron ore in the country and the ore's iron content is 60 per cent and above. The Rourkela plant and the Tata Iron and Steel Co. depend upon Orissa ore. The state accounted for about 29 per cent of the country's production of manganese ore in 1974. Other minerals include limestone and dolomite, chromite, non-coking coal, bauxite, graphite, china clay, nickel ore and gallena. The total production of minerals in 1974 was about 113 lakh tonnes.

Since Independence, 45 large industries have been set up in the state in the public and private sectors. Most of them are mineral-based. Among them are the Rourkela steel plant, a pig iron plant at Barbil and a ferro-chrome plant at Jajpur Road, two ferro-manganese plants, a ferro-silicon plant and an aluminium smelter plant. There are three refractory plants and two cement plants. An oxygen plant, an alloy steel casting plant and two jute twine plants have been newly set up. One rice bran solvent extraction plant has been set up at Bhadrak.

[1] As on 29 May 1975.
[2] As on 1 July 1971. Subsequently, four new districts of Zunheboto, Wokha, Pheka and Mom have been formed.

There are three large paper mills at Rayagada, Choudwar and Brajarajnagar. The Hindustan Steel Ltd. has also a fertilizer plant at Rourkela. Chemical industries include a caustic soda plant and a salt manufacturing unit at Ganjam and an industrial explosives plant at Rourkela.

Other industries of importance are two large sugar plants, one at Rayagada and the other at Aska, the latter in the co-operative sector; a glass works at Baranga, a heavy machine tool plant at Kansbahal, a refrigerator manufacturing unit at Choudwar, a re-rolling mill at Hirakud and three textile mills at Choudwar, Jharsuguda and Bargarh, the last one in the co-operative sector, a phosphatic fertilizer plant at Rourkela, a *sal* seed extraction unit in Mayurbhanj district and a dichromatic plant in Cuttack district.

IRRIGATION AND POWER

Irrigation facilities in the state have expanded considerably since 1947. Water reservoirs have been constructed under the Hirakud Dam project, the Rushikulya project, the Salandi project, the Delta irrigation project and 13 medium irrigation projects which have created a total irrigation potential of 7,02,700 hectares during *kharif* and 3,07,280 hectares during *rabi*. Besides, a systematic programme for investigation of 87 major and medium irrigation projects has been drawn up to provide irrigation facilities to backward and drought-prone areas. A Rs 750-crore groundwater utilisation scheme is also proposed to be taken up for irrigating 20 lakh *kharif* hectares and 12 lakh *rabi* hectares.

The Hirakud Dam project is a multi-purpose river valley project with the objectives of power generation (270 mw), flood control, navigation and irrigation. Balimela Dam, Machchkund and Talcher thermal stations are the other important power projects.

The total installed capacity of power, both hydel and thermal, by March 1975 was 914 mw. Orissa had 25 electrified villages in 1955-56; the number increased to 11,868 by the end of June 1975. As many as 1,880 lift irrigation points had been energised by the end of June 1975.

GOVERNMENT

Governor[1]: Akbar Ali Khan

Council of Ministers[1]

Chief Minister: Smt Nandini Satpathy
Cabinet Ministers: Binayak Acharya, Jadunath Das Mohapatra, Sriballav Panigrahi, Lakshman Mallick, Ramachandra Ulaka and Gangadhar Mahapatra.
Ministers of State: Mohan Nayak, Somanath Rath, Dibyalochan Sekhar Deo, Brahmananda Biswal, Krupasindhu Bhoi, Benudhar Baliar Singh, Kahnu Charan Lenka and Bhagirathi Gamango.
Deputy Ministers: Matlub Ali, Kunria Majhi and Jagannath Patnaik.

Legislative Assembly[2]

Speaker: Braja Mohan Mohanty
Deputy Speaker: Chintamony Jena

High Court[3]

Chief Justice: G.K. Misra
Judges: Sukanta Kishore Ray, B.K. Ray, K.B. Panda, Sachchidananda Acharya, Ranganath Misra and P.K. Mohanty
Additional Judge: N.K. Das

Public Service Commission[1]

Chairman: N.K. Ray
Members: Saroj Kumar Patra and T. Sanganna.

[1]As on 20 October 1975. [2]As on 26 July 1975. [3]As on 1 June 1975.

Chief Secretary: V.S. Mathews

AREA, POPULATOIN AND HEADQUARTERS OF DISTRICTS

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Balasore	6,394	18,30,504	Balasore
2.	Baudh Khondmals	11,070	6,21,675	Phulbani
3.	Bolangir	8,903	12,63,657	Bolangir
4.	Cuttack	11,211	38,27,678	Cuttack
5.	Dhenkanal	10,826	12,93,914	Dhenkanal
6.	Ganjam	12,527	22,93,808	Chhatrapur
7.	Kalahandi	11,835	11,63,869	Bhawanipatna
8.	Keonjhar	8,240	9,55,514	Keonjhar
9.	Koraput	26,960	20,43,281	Koraput
10.	Mayurbhanj	10,412	14,34,200	Baripada
11.	Puri	10,159	23,40,859	Puri
12.	Sambalpur	17,570	18,44,898	Sambalpur
13.	Sundargarh	9,675	10,30,758	Sundargarh

PUNJAB

Area: 50,362 sq. km	*Population:* 1,35,51,060
Capital: Chandigarh	*Principal language:* Punjabi

AGRICULTURE

Over 76 per cent of the total population of Punjab is engaged in agricultural pursuits. The state is surplus in foodgrains, especially wheat and rice. Other main foodgrains are maize, bajra, jowar, gram, barley and pulses. Major cash crops are oilseeds, sugarcane, tobacco, cotton and potatoes. The production of foodgrains in 1974-75 has been estimated at 81 lakh tonnes against 77.2 lakh tonnes in 1973-74.

Forests cover an area of 2,11,128 hectares or 4.2 per cent of the area of the state.

INDUSTRY

Punjab is the home of small-scale industries. Sericulture, footwear, machine tools, bicycle parts, sewing machines and parts, plastic goods, pipes, nuts and bolts, wood and machine screws are some of the important small-scale industries. On 31 March 1974 the number of registered small scale units was 36,713. Punjab also produces 90 per cent of the country's woollen hosiery.

Some of the major industries established recently or being established through the efforts of the Punjab Industrial Development Corporation are tractors, dry cell batteries, polyester fibres, nylon, automobile tyres and tubes, synthetic detergents, scooters, breweries, fertilizers, steel billets, TV sets, electronic components and precision instruments. The Nangal fertilizer factory is a major central government undertaking in the state. The Centre is also setting up a naphtha-based fertilizer factory at Bhatinda.

IRRIGATION AND POWER

Important irrigation works implemented since 1947 are the Bhakra Nangal Dam, Bhakra canals, Harike Barrage with a new lined canal called Sirhind Feeder and remodelling of Madhopur Headworks into a barrage. The Madhopur-Beas link was constructed to transfer the surplus waters of river Ravi to river Beas. A similar project, the Sutlej-Beas link project, is in an advanced stage of construction.

The Pong Dam on river Beas is an important hydro-electric project which is under construction. The Guru Nanak thermal power plant at Bhatinda is another important project undertaken by the state.

The total installed power capacity, both hydel and thermal, on 31 March 1974 was 576 mw. Punjab had only 369 electrified towns and villages in 1956; the number increased to 7,717 by 31 March 1975. For irrigation, 1,38,902 pumpsets/tube-wells had been energised as compared to 3,095 in 1956.

GOVERNMENT *Governor:* Mahendra Mohan Chaudhury

Council of Ministers[1]

Chief Minister: Giani Zail Singh
Cabinet Ministers: Umrao Singh, Hans Raj Sharma, Gurmail Singh, Gurbanta Singh and Yash Pal.
Ministers of State: Joginder Pal Pandey, Santokh Singh Randhawa, Kum. Sarla Prasher, Sohan Singh Jalalusman, Dilbagh Singh Daleke, Balbir Singh, Gurbax Singh Sibia, Gurdarshan Singh and Smt Gurbrinder Kaur Brar.
Deputy Ministers: Bal Ram and Khushal Behl.
Chief Parliamentary Secretary: Gurcharan Singh Nihalsingwala

Legislative Assembly[1]

Speaker: Kewal Krishan
Deputy Speaker: Nasib Singh Gill

High Court

Punjab and Haryana have a common High Court. For list of judges, see under Haryana.

Public Service Commission[1]

Chairman: Jaswant Rai Bansal
Members: Shivdev Singh, Onkar Singh Kalkat, Smt Santosh Choudhury, Niranjan Singh Mitha and Jaspal Singh.

Chief Secretary: H.S. Chhina

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[2]

District	*Area (sq. km)*	*Population (1971 census)*	*Headquarers*
1. Amritsar	5,025	18,35,500	Amritsar
2. Bhatinda	5,564	10,27,293	Bhatinda
3. Fridkot	5,746	11,51,738	Faridkot
4. Ferozepore	5,923	10,44,936	Ferozepore
5. Gurdaspur	3,557	12,29,249	Gurdaspur
6. Hoshiarpur	3,887	10,52,153	Hoshiarpur
7. Jullundur	3,396	14,54,501	Jullundur
8. Kapurthala	1,634	4,29,514	Kapurthala
9. Ludhiana	3,793	14,19,421	Ludhiana
10. Patiala	4,669	12,11,303	Patiala
11. Ropar	2,086	5,48,802	Ropar
12. Sangrur	5,096	11,46,650	Sangrur

RAJASTHAN

Area: 3,42,214 sq. km	*Population:* 2,57,65,806
Capital: Jaipur	*Principal languages:* Rajasthani and Hindi

AGRICULTURE Gross irrigated area in Rajasthan is about 26 lakh hectares while net sown area is about 153 lakh hectares. Agricultural production is mainly dependent on rainfall. The principal crops are jowar, bajra,

[1]As on 31 December 1975. [2]*Source*: State Government.

maize, gram, wheat, oilseeds, cotton, sugarcane and tobacco. The production of foodgrains in 1973-74 was 67.16 lakh tonnes as against 51.52 lakh tonnes in 1972-73. Production of sugarcane went up from 13.52 lakh tonnes in 1972-73 to 19.40 lakh tonnes in 1973-74. The production of oilseeds was 3.39 lakh tonnes in 1973-74 as against 3.82 lakh tonnes in 1972-73. The production of cotton was 2.84 lakh bales in 1973-74.

Forests cover 36,164 sq. km or 10.6 per cent of the state's area.

INDUSTRY

Rajasthan accounts for the country's entire output of lead and zinc concentrates, emeralds and garnets. Similarly, 92 per cent of India's gypsum, 90 per cent of silver ore, 75 per cent of asbestos and felspar and 20 per cent of mica are mined here. It has rich salt deposits at Sambhar and other places. Copper mines are situated at Khetri and Dariba.

Textiles, rugs and woollen goods, sugar, cement, glass, sodium producing plant, oxygen and acetylene producing units, manufacture of pesticides, insecticides and dyes are some of the major industries. Other enterprises include the manufacture of caustic soda, calcium carbide, nylon and tyre cord and copper smelting. Among the important central government undertakings in the state is the Precision Instruments factory at Kota.

Important handicrafts are marble work, woollen carpets, jewellery, embroidery, articles of leather, pottery and brass embossing.

IRRIGATION AND POWER

The major irrigation schemes implemented since 1947 are the Kota Barrage and Rana Pratap Sagar (both inter-state projects in collaboration with Madhya Pradesh). The Rajasthan Canal will be the longest in the world when completed. Besides a number of small and medium irrigation schemes, the state is benefited from Gurgaon Canal, Bhakra Nangal project, Gandhi Sagar Dam and Beas project.

The major power projects are the Jawahar Sagar and Rana Pratap Sagar. The total installed capacity of power by the end of 1973-74 was 705.5 mw. A two unit nuclear power station is being developed at Kota, the first unit of which has started generating power. Rajasthan had only 42 electrified villages and towns in 1951; the number increased to 6,102 in March 1974. For irrigation, 82,528 pumpsets/tube-wells had been energised by 31 December 1974 as against only 30 in 1951.

GOVERNMENT

Governor: Jogendra Singh

Council of Ministers[1]

Chief Minister: Harideo Joshi
Cabinet Ministers: Paras Ram Maderna, Chandan Mal Baid, Shiv Charan Mathur, Hira Lal Devpura, Khet Singh, Mohan Chhangani and Ram Narayan Choudhary.
Ministers of State: Smt Kamla Beniwal, Jhujhar Singh, Mool Chand Meena, Farooq Hassan, Munshilal Mahavar, Gulab Singh Shaktawat and Banwari Lal.

Legislative Assembly[1]

Speaker: Ram Kishore Vyas
Deputy Speaker: Ram Singh Yadav

High Court[2]

Chief Justice: P.N. Shinghal
Judges: V.P. Tyagi, Kan Singh, Chand Mal Lodha, S.N. Modi, J.P. Jain, M.L. Joshi and K.D. Sharma.
Additional Judges: D.P. Gupta and M.L. Shrimal.

[1] As on 17 October 1975. [2] As on 1 June 1975.

Public Service Commission[1]

Chairman: Mohd. Yakub Khan
Members: Dhuleswar Meena, H.D. Gupta and Nathulal Jain

Chief Secretary: M. Mukerjee

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Ajmer	8,479	11,47,729	Ajmer
2.	Alwar	8,382	13,91,162	Alwar
3.	Banswara	5,037	6,54,586	Banswara
4.	Barmer	28,387	7,74,805	Barmer
5.	Bharatpur	8,093	14,90,206	Bharatpur
6.	Bhilwara	10,450	10,54,890	Bhilwara
7.	Bikaner	27,231	5,73,149	Bikaner
8.	Bundi	5,550	4,49,021	Bundi
9.	Chittaurgarh	10,858	9,44,981	Chittaurgarh
10.	Churu	16,829	8,74,439	Churu
11.	Dungarpur	3,770	5,30,258	Dungarpur
12.	Ganganagar	20,629	13,94,011	Ganganagar
13.	Jaipur	14,000	24,82,385	Jaipur
14.	Jaisalmer	38,401	1,66,761	Jaisalmer
16.	Jalor	10,640	6,67,950	Jalor
16.	Jhalawar	6,216	6,22,001	Jhalawar
17.	Jhunjhunun	5,929	9,29,230	Jhunjhunun
18.	Jodhpur	22,860	11,52,712	Jodhpur
19.	Kota	12,437	11,43,870	Kota
20.	Nagaur	17,718	12,62,157	Nagaur
21.	Pali	12,391	9,70,002	Pali
22.	Sawai Madhopur	10,593	11,93,528	Sawai Madhopur
23.	Sikar	7,732	10,42,648	Sikar
24.	Sirohi	5,135	4,23,815	Sirohi
25.	Tonk	7,200	6,25,830	Tonk
26.	Udaipur	17,267	18,03,680	Udaipur

SIKKIM

Area: 7,299 sq. km
Capital: Gangtok
Population: 2,09,843
Principal languages: Bhutia, Nepali, Lepcha and English

AGRICULTURE

The state's economy is principally agrarian. Rice, maize, millet and barley are the main crops. Cardamom, potato, citrus, apple and pineapple are the major cash crops.

Agricultural experimental farms are functioning at Gyalshing and Lachung besides a potato farm at Hilley. There is a cardamom nursery at Mangan and a fruit nursery at Lagyap and an apple orchard at Lachung.

About a third of the area is covered by forests. *Sal* abounds in the south while conifers are found in plenty in the north. Broad leaf varieties grow abundantly in other parts.

Sheep, goats, cattle and yaks are abundant and wool, skins and hides are among the principal raw materials for industries. There is an animal husbandry farm at Tadong.

INDUSTRY

The Sikkim Mining Corporation, Rangpo, set up in 1960, produces copper, lead and zinc. In 1974-75, the total production was 3,000 tonnes of copper, 500 tonnes of lead and 800 tonnes of zinc. An

[1]As on 17 October 1975.

industrial survey was undertaken in Sikkim some years ago. Pyrites, limestone and coal are also mined in the state. The copper mine of Dikchu is under exploration.

The Government Institute for Cottage Industries, set up in 1957 at Gangtok, encourages local handicrafts. Wool weaving and carpet weaving are among important traditional industries. Important industrial ventures include the fruit preservation factory at Singtam, the distillery near Rangpo and a tannery at Majhitar.

IRRIGATION AND POWER

Sikkim has considerable water-power potential besides a hydro-electric station generating power for Gangtok. In 1961, the Rongni hydel project with a generating capacity of 2.1 mw was completed. Hydel schemes are in progress at Mangan, Rimbi and Rothak.

GOVERNMENT

Sikkim became a full fledged state of the Indian Union with effect from 26 April 1975. On 1 March 1975 it had become an associate state. The Legislative Assembly adopted a resolution on 10 April 1975 abolishing the institution of Chogyal and seeking for the territory full statehood in the Indian Union.

This resolution was endorsed by the people of Sikkim by an overwhelming majority in a special poll held on 14 April 1975.

The Constitution (Thirty-sixth Amendment) Act, 1975, was passed by Parliament on 26 April 1975 for giving effect to the wishes of the people of Sikkim to become fully integrated with the Indian Union as a constituent state.

Governor: B. B. Lal

Council of Ministers[1]

Chief Minister: Kazi Lhendup Dorji Khangsarpa
Ministers: B.P. Dahal, Rinzing Tongden Lepcha, Dorji Tshering Bhutia, Nayan Tshering Lepcha, B.P. Kharel and K.B. Limboo.

Legislative Assembly[1]

Speaker: C. S. Rai
Deputy Speaker: R.C. Paudyal

High Court[1]

Chief Justice: Rajindar Sachar

Chief Secretary: T.S. Gyaltshen

POPULATION AND HEADQUARTERS OF DISTRICTS

District	*Population (1971 census)*	*Headquarters*
1. East	85,621	Gangtok
2. North	13,014	Mangan
3. South	52,423	Namchi
4. West	58,785	Gyalshing

TAMIL NADU

Area: 1,30,069 sq. km	*Population:* 4,11,99,168
Capital: Madras	*Principal language:* Tamil

AGRICULTURE

The total cultivated area is about 63.48 lakh hectares, of which the irrigated area is about 27.10 lakh hectares (41 per cent). The main

[1] As on 12 November 1975.

food crops grown in the state are rice, maize, jowar, bajra, pulses and millets. Important commercial crops are sugarcane, oilseeds, cotton, tobacco, coffee, tea, rubber and pepper. Production of foodgrains was 71.19 lakh tonnes in 1973-74 and that of sugarcane and oilseeds 9.96 and 12.5 lakh tonnes respectively.

Forests cover an area of 21,072 sq. km. The main forest products are timber, sandalwood, softwood, bamboo and eucalyptus.

INDUSTRY

Limestone, magnesite, mica, quartz, felspar, salt, bauxite, lignite and gypsum are some of the minerals found in the state.

Cotton textiles is one of the major industries. There are nearly 210 cotton textile mills in the state and most of the spinning mills are supplying yarn to the decentralised sector, namely, the handloom industry. Other important industries are leather tanning, manufacture of textile machinery, power driven pumps, bicycles, electrical machinery, tractors, tyres and tubes, bricks and tiles and silk. The state is the second largest producer of cement.

A number of public sector undertakings are located in Tamil Nadu. Important among them are the Neyveli Lignite complex, the Integral Coach Factory, the High Pressure Boiler plant, the Hindustan Photo Films factory, the Surgical Instruments factory, the Hindustan Teleprinters, the Madras Refineries, the Madras Fertilizers as also some defence units including the Heavy Vehicles factory. The Salem steel plant which is being set up as a subsidiary of SAIL will, when commissioned, produce 1.95 lakh tonnes of steel and strip products.

The state is an important exporter of tanned hides and skins, leather goods, cotton piecegoods and yarn, tea, coffee, spices, engineering goods and automobile ancillaries.

IRRIGATION AND POWER

Important irrigation schemes implemented since Independence are the Bhavani, the Amravati, the Vaigai, the Parambikulam-Aliyar, the Krishnagiri, the Sattanur and the Pullambadi-Kattalai high level canal.

There are 17 hydro-electric stations and 3 thermal stations in the state. The total installed capacity of power, hydel and thermal exceeds 2,100 mw. Construction of an atomic power station at Kalpakkam in Chingleput district is in progress. Tamil Nadu had 61,223 electrified towns, villages and hamlets including 23,920 Harijan colonies on 1 May 1975.

GOVERNMENT

Governor: K.K. Shah

The State came under President's rule and the Assembly was dissolved on 31 January1976.

Legislative Council[1]

Chairman: C.P. Chittrarasu
Deputy Chairman: M.P. Sivagnanam

High Court[2]

Chief Justice: K. Veeraswami
Judges: P.S. Kailasam, N.K. Reddy, T. Ramaprasada Rao, M.M.K. Ismail, P.R. Gokulakrishnan, Gopalaswami Ramanujam, V. Ramaswamy, N.S. Ramaswami, C.J.R. Paul, S. Natarajan and A. Varadarajan.
Additional Judges: V. Seetharaman, S.R. Pandian, S. Mohan, S.S. Suryamurthy and V. Balasubrahmanyan.

[1]As on 10 October 1975. [2]As on 1 June 1975.

Public Service Commission[1]

Chairman: J.A. Ambasankar
Members: K. Pandurangam, A. Palaniswamy, P. Sankaran, V. Srinivasan and S.M. Sulaiman.

Chief Secretary: P. Sabanayagam

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[2]

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Chingleput	7,920	29,07,599	Kancheepuram
2.	Coimbatore	15,673	43,73,178	Coimbatore
3.	Dharmapuri	9,643	16,77,775	Dharmapuri
4.	Kanyakumari	1,684	12,22,549	Nagercoil
5.	Madras	128	24,69,449	Madras
6.	Madurai	12,629	39,38,197	Madurai
7.	Nilgiri	2,549	4,94,015	Ootacamund
8.	North Arcot	12,265	37,55,797	Vellore
9.	Ramanathapuram	12,578	28,60,207	Madurai
10.	Salem	8,643	29,92,616	Salem
11.	South Arcot	10,898	36,17,723	Cuddalore
12.	Pudukkottai	4,137	9,47,351	Pudukkottai
13.	Tiruchirappalli	11,208.1	31,10,426	Tiruchirappalli
14.	Thanjavur	8,680.9	36,31,771	Thanjavur
15.	Tirunelveli	11,433	32,00,515	Tirunelveli

TRIPURA

Area: 10,476 sq. km[3]
Capital: Agartala
Population: 15,56,342
Principal languages: Bengali, Tripuri and Manipuri

AGRICULTURE

About 60 per cent of the area is under forests. Irrigated area is seven per cent of the cultivated area. Rice, jute and *mesta*, potatoes, oilseeds, sugarcane and cotton are the main crops. Production of rice in 1974-75 was estimated at 3.26 lakh tonnes.

INDUSTRY

Tea is the major industry in Tripura. Tea plantations cover an area of about 5,530 hectares and the annual production of processed tea is about 29.58 lakh kg. Important cottage industries are handloom, handicrafts and khadi.

Some major industries are proposed to be set up in the state. They include a paper mill and a jute mill. Establishment of the jute mill has made substantial progress.

IRRIGATION AND POWER

A number of schemes of lift irrigation and installation of tube-wells were taken up in the Fourth Plan. Sixty-three schemes have so far been completed and two more are nearing completion. With the completion of all these schemes, more than 890 hectares of land will be brought under cultivation.

The total installed power capacity on 31 May 1975 was 5.15 mw. One hundred and fifty-five villages had been electrified and 40 pumpsets energised by May 1975.

GOVERNMENT

Governor: L.P. Singh

[1] As on 10 October 1975. [2] *Source:* State Government.
[3] As reorganised on 21 January 1972 according to North Eastern Areas (Reorganisation) Act, 1971.

Council of Ministers[1] *Chief Minister:* S. Sen Gupta
Cabinet Ministers: Monoranjan Nath, H.C. Choudhury, D.K. Choudhury, K.C. Das, T.M. Das Gupta and K.D. Bhattacherjee.
Ministers of State: M. Ali, Smt Basana Chakraborty and S.C. Shome.
Deputy Minister: H. Dewan

Legislative Assembly[1] *Speaker:* Manindra Lal Bhowmick
Deputy Speaker: Usha Ranjan Sen

High Court The jurisdiction of Gauhati High Court extends over Tripura. For list of judges, see under Assam.

Public Service Commission[1] *Chairman:* S.K. Ghosh
Member: H.K. Deb Barman

Chief Secretary: B.S. Raghavan

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS[2]

District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1. North Tripura	3,541	4,05,009	Kailashahar
2. South Tripura	3,577	3,99,728	Udaipur
3. West Tripura	3,359	7,51,605	Agartala

UTTAR PRADESH

Area: 2,94,413 sq. km	*Population:* 8,83,41,144
Capital: Lucknow	*Principal language:* Hindi

AGRICULTURE The principal food crops are wheat, rice, gram, barley, maize and bajra. Cotton, linseed, groundnut, sugarcane, tea, sesamum, rapeseed, mustard and tobacco are the important cash crops. Jute is also cultivated in some areas. It is the main opium growing state in India.

Production of foodgrains in 1973-74 was 155.6 lakh tonnes; sugarcane 608 lakh tonnes and oilseeds 15.5 lakh tonnes.

Forests cover 8.6 per cent of the area of the state.

INDUSTRY Uttar Pradesh is one of the principal sugar producing states. While the handloom industry is the largest cottage industry, cotton and woollen textiles, leather and footwear, distilleries and breweries, paper and chemicals, agricultural implements and glass and glass products are some of the other flourishing industries.

A number of big public sector undertakings have been set up in the state. These are: the Bharat Heavy Electricals at Hardwar, the Indian Drugs and Pharmaceuticals at Rishikesh, the Diesel Locomotive factory at Varanasi, fertilizer factory at Gorakhpur, the Triveni Structurals at Naini, the deep freeze meat plant at Tundla, the Hindustan Aeronautics at Lucknow and two cement factories at Churk and Dalla. There are also the Bharat Electronics Ltd., Ghaziabad; Scooters India Ltd., Lucknow and Tannery and Footwear Corporation of India Ltd., Kanpur. The Artificial Limbs Manufacturing Corpo-

[1]As on 16 October 1975.
[2]As re-organised on 21 January 1972 according to North Eastern Areas (Reorganisation) Act 1971.

ration of India Ltd., Kanpur and Telephone Factory, Rai Bareli are among the Central projects being set up in Uttar Pradesh.

The traditional handicrafts are silk fabrics, metal-ware, wood-work, ceramics, stone work, dolls, artistic leather articles, ivory articles, papier mache, perfumery, bamboo products and musical instruments.

IRRIGATION AND POWER

The state has some of the oldest canal systems in the country among which are the eastern Yamuna canal, the upper and lower Ganga canals, Agra canal, Betwa canal, Sarda canal, Dhasan canal and Ken canal. Important irrigation projects implemented since 1947 are Matatilla Dam, Ramganga, western Gandak canal and Sarda Sagar, besides a number of small and medium irrigation projects. The first stage of the Rs 200-crore Sarda Sahayak irrigation project has been completed providing irrigation to 1.27 lakh hectares. On completion, this project will irrigate 15 lakh hectares in central and eastern districts of the state lying in Ganga-Ghagra doab.

The total installed capacity of power, both hydel and thermal, was 1,886 mw on 31 March 1975. An atomic power station is to be set up at Narora in Bulandshahr district. The state had only 110 electrified villages in 1951; the number increased to 30,465 on 31 December 1974. For irrigation, 2,29,899 pumpsets/tube-wells had been energised compared to only 3,000 tube-wells in 1951.

GOVERNMENT

Governor: M. Channa Reddy

Council of Ministers[1]

Chief Minister: Narain Dutt Tewari,
Cabinet Ministers: Ajit Pratap Singh, Baldeo Singh Arya, Ramji Lal Sahayak, Smt Rajendra Kumari Bajpai, Swami Prasad Singh, Shanti Prapanna Sharma, Smt Mohsina Kidwai, Charan Singh, Prabhu Narain Singh, Virendra Varma, Lok Pati Tripathi, Shiva Prasad Singh and Ammar Rizvi.
Ministers of state: Azizur Rahman, Smt Indra Mohini, Sardar Kultar Singh, Chet Ram Gangwar, Jagannath Chaudhari, Dharm Vir, Narendra Singh Bhandari Vitta, Mumtaz Mohammad Khan, Yash Pal Singh, Ramendra Verma, Rajendra Prasad Gupta, Ramayan Rai, Vijai Kumar Tripathi, Vir Bahadur Singh, Srikrishna Goel and Habibur Rahman Nomani.

Legislative Council[2]

Chairman: Virendra Swaroop
Deputy Chairman: Kunwar Devendra Pratap Singh

Legislative Assembly[2]

Speaker: Vasudev Singh
Deputy Speaker: Kunwar Shivanath Singh Kushwaha

High Court[3]

Chief Justice: K.B. Asthana
Judges: G.C. Mathur, Satish Chandra, Yashoda Nandan, R.L. Gulati, R.B. Misra, C.D. Parekh, O.P. Trivedi, Hari Swarup, M.N. Shukla, K.B. Srivastava, H.N. Seth, M.H. Hussain, S.B. Malik, Jagmohan Lal Sinha, K.N. Singh, C.S.P. Singh, Gopinath, T.S. Misra, N.D. Ojha, K.N. Seth, P.N. Bakshi, H.N. Kapoor, H.L. Kapoor, Onkar Singh, Prem Prakash, S.K. Kaul, Chandra Prakash and M.P. Mehrotra.
Additional Judges: Dwarkanath Jha, Amitav Banerji, Brahma Nath

[1]As on 11 March 1976. [2]As on 15 October 1975. [3]As on 1 June 1975.

Katju, Krishna Chandra Agarwal, G.D. Srivastava, J.P. Chaturvedi and M.P. Saxena.

Public Service Commission[1]

Chairman: Bishambhar Singh
Members: Basant Singh Seth, Vir Sen, M.S. Haq, S.N. Shukla, Brijlal Varma, Chunni Lal and Ram Hit Ram.

Chief Secretary: Mahmood Butt

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	*Area* (*sq. km*)	*Population* (1971 *census*)	*Headquarters*
1.	Agra	4,816	23,08,638	Agra
2.	Aligarh	5,024	21,11,829	Aligarh
3.	Allahabad	7,255	29,37,278	Allahabad
4.	Almora	7,023	7,50,038	Almora
5.	Azamgarh	5,744	28,57,484	Azamgarh
6.	Bahraich	6,871	17,26,972	Bahraich
7.	Ballia	3,183	15,88,935	Ballia
8.	Banda	7,645	11,82,215	Banda
9.	Bara Banki	4,422	16,35,593	Bara Banki
10.	Bareilly	4,125	17,79,867	Bareilly
11.	Basti	7,309	29,84,090	Basti
12.	Bijnor	4,852	14,90,185	Bijnor
13.	Budaun	5,158	16,45,967	Budaun
14.	Bulandshahr	4,895	20,73,343	Bulandshahr
15.	Chamoli	9,125	2,92,571	Chamoli
16.	Dehra Dun	3,088	5,77,306	Dehra Dun
17.	Deoria	5,400	28,12,350	Deoria
18.	Etah	4,449	15,70,925	Etah
19.	Etawah	4,327	14,47,702	Etawah
20.	Faizabad	4,427	19,27,281	Faizabad
21.	Farrukhabad	4,349	15,56,930	Fatehgarh
22.	Fatehpur	4,168	12,78,254	Fatehpur
23.	Garhwal	5,440	5,53,028	Pauri
24.	Ghazipur	3,381	15,31,654	Ghazipur
25.	Gonda	7,331	23,02,029	Gonda
26.	Gorakhpur	6,316	30,38,177	Gorakhpur
27.	Hamirpur	7,192	9,88,215	Hamirpur
28.	Hardoi	6,012	18,49,519	Hardoi
29.	Jalaun	4,549	8,13,490	Orai
30.	Jaunpur	4,040	20,05,434	Jaunpur
31.	Jhansi	10,069	13,07,058	Jhansi
32.	Kanpur	6,121	29,96,232	Kanpur
33.	Kheri	7,691	14,86,590	Lakhimpur
34.	Lucknow	2,528	16,17,846	Lucknow
35.	Mainpuri	4,254	14,45,534	Mainpuri
36.	Mathura	3,797	12,90,307	Mathura
37.	Meerut	5,944	33,66,953	Meerut
38.	Mirzapur	11,301	15,41,088	Mirzapur
39.	Moradabad	5,946	24,28,971	Moradabad
40.	Muzaffarnagar	4,245	18,02,289	Muzaffarnagar
41.	Naini Tal	6,792	7,90,080	Naini Tal
42.	Pilibhit	3,504	7,52,114	Pilibhit
43.	Pithoragarh	7,217	3,13,747	Pithoragarh
44.	Pratapgarh	3,730	14,22,707	Bela
45.	Rae Bareli	4,603	15,10,812	Rae Bareli
46.	Rampur	2,372	9,01,209	Rampur
47.	Saharanpur	5,526	20,54,834	Saharanpur
48.	Shahjahanpur	4,581	12,86,104	Shahjahanpur
49.	Sitapur	5,738	18,84,400	Sitapur
50.	Sultanpur	4,424	16,42,928	Sultanpur
51.	Tehri-Garhwal	4,421	3,97,385	Narendra Nagar
52.	Unnao	4,586	14,84,393	Unnao
53.	Uttarkashi	8,016	1,47,805	Uttarkashi
54.	Varanasi	5,091	28,52,459	Varanasi

[1]As on 15 October 1975.

WEST BENGAL

Area: 87,853 sq. km	*Population:* 4,43,12,011
Capital: Calcutta	*Principal language:* Bengali

AGRICULTURE

About 57.5 per cent of the total population of West Bengal is engaged in agricultural pursuits. Irrigated area forms about 26 per cent of the cultivated area which is about 60 per cent of the total area. The state occupies a leading position among the rice producing states in the country. The area under paddy is nearly 70 per cent of the total cultivated area. Other important food crops are wheat, maize, barley, gram and peas. Among the cash crops, the most important are jute, tea and pan leaf, while oilseeds, tobacco and sugarcane are also produced. Production of foodgrains was 58 lakh tonnes in 1973-74. During the year production of jute was 40.5 lakh bales, pulses 2.84 lakh tonnes, oilseeds 76,500 tonnes and potato 9.65 lakh tonnes. The state earns considerable foreign exchange through export of jute and tea.

Temperate fruits have been successfully grown in the Darjeeling hills. This is expected to help the economic development of this region.

Forests cover about 13.4 per cent of the area of the state. Major forest products are timber, honey, firewood, charcoal, *katha* and bamboo.

INDUSTRY

Coal and fire-clay are the two most important minerals found in West Bengal. Other minerals are china clay, limestone, copper, iron, silica, manganese, sandstone and moulding sand.

West Bengal is a major industrial state in the country. There are two steel plants—one in the public sector at Durgapur and the other in the private sector at Burnpur. The other major industries are jute, tea, cotton textiles, silk, automobile, bicycle, light engineering, paper, pharmaceuticals, chemicals, aluminium, sugar, timber processing, ceramic and glass, leather and footwear, bone-meal and dairying. A number of central public sector undertakings including locomotive, cable, fertilizer, ship-building and ordnance are also located in West Bengal. New industrial areas are being developed at Asansol, Durgapur, Farakka, Haldia, Kalyani, Kharagpur, Santaldih and Siliguri. The Fertilizer Corporation of India is setting up a fertilizer project at Haldia, where a new port and an oil refinery are also under construction. New industrial ventures include cement, scooter, electricals and mini-steel plants.

IRRIGATION AND POWER

Important multi-purpose irrigation and power schemes implemented since 1947 are the Damodar Valley project and the Mayurakshi project. The other major irrigation project is the Kangsabati project.

Among the four major power projects are the Bandel thermal power station (320 mw) and the Durgapur power project (250 mw). The Calcutta Electric Supply Corporation has four stations with an installed capacity of 362 mw. In addition, the Damodar Valley Corporation also supplies power (310 mw) to West Bengal from its generating stations. The total installed capacity exceeds 1,300 mw.

West Bengal had only 386 electrified villages in 1951; the number increased to 10,000 by the end of 1974-75. More than 6,400 irrigation pumps have been energised.

GOVERNMENT *Governor:* A.L. Dias

Council of Ministers[1]

Chief Minister: Siddhartha Shankar Ray
Cabinet Ministers: Abdus Sattar, Zainal Abedin, Mrityunjoy Banerjee, A.B.A. Gani Khan Chaudhuri, Tarun Kanti Ghosh, Sankar Ghosh, Gurupada Khan, Sitaram Mahato, Gopaldas Nag, Gyansingh Sohanpal, Ajit Panja and Bholanath Sen.
Ministers of State: Pradip Bhattacharyya, Ananda Mohan Biswas, Prafulla Kanti Ghosh, Fazle Haque, Danish Lakra, Subrata Mukherjee, Gobinda Naskar, Ramkrishna Saraogi, Atish Chandra Sinha, G. Gurung and Motaher Hossain.
Deputy Minister: Amala Soren

Legislative Assembly[1]

Speaker: Apurba Lal Mazumdar
Deputy Speaker: Haridas Mitra

High Court[2]

Chief Justice: S.P. Mitra
Judges: Syed Sadat Abdul Masud, A.N. Sen, S.K. Mukherjee, S.C. Ghose, R.M. Datta, N.C. Talukdar, S.C. Deb, S. Mukherji, T.K. Basu, S.K. Datta, P.K. Banerjee, A.K. Basu, A.K. Sen, Chittatosh Mukherjee, A.K. Mookerji, M.M. Dutt, P.C. Borooah, S.K. Roy Chaudhuri, K.J. Sengupta, R.N. Bhattacharyya, S.K. Bhattacharyya, S.K. Hazra, A.K. Janah, P.K. Chanda, N.C. Mukharji, A.N. Banerjee, T.S. Basu, A.K. Sarkar, D.K. Sen, A.P. Bhattacharya, H.N. Sen and R.N. Pyne.
Additional Judges: B.C. Ray, M.N. Roy, B.C. Basak and R.K. Sharma

Public Service Commission[3]

Chairman: A.J.A. Tayeb
Members: Md. Sabir Khan, K.C. Saha, A.K. Majumdar, M.K. Guha and H.K. Chakraborty

Chief Secretary: B.R. Gupta

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Bankura	6,881	20,31,039	Bankura
2.	Birbhum	4,550	17,75,909	Suri
3.	Burdwan	7,028	39,16,174	Burdwan
4.	Calcutta	104	31,48,746	Calcutta
5.	Cooch Behar	3,386	14,14,183	Cooch Behar
6.	Darjeeling	3,075	7,81,777	Darjeeling
7.	Hooghly	3,145	28,72,116	Chinsurah
8.	Howrah	1,474	24,17,286	Howrah
9.	Jalpaiguri	6,245	17,50,159	Jalpaiguri
10.	Malda	3,713	16,12,657	English Bazar
11.	Midnapore	13,724	55,09,247	Midnapore
12.	Murshidabad	5,341	29,40,204	Baharampur
13.	Nadia	3,926	22,30,270	Krishnanagar
14.	Purulia	6,259	16,02,875	Purulia
15.	Twenty Four Parganas	13,796	84,49,482	Alipur
16.	West Dinajpur	5,206	18,59,887	Balurghat

[1]As on 10 October 1975 [2]As on 1 June 1975 [3]As on 17 June 1975

ANDAMAN AND NICOBAR ISLANDS

Area: 8,293 sq. km[1] *Population:* 1,15,133
Capital: Port Blair

AGRICULTURE About 19 per cent of the total working population of the 300 and odd islands forming the union territory is engaged in agricultural pursuits. Irrigated area is negligible. The tropical climate and fertile soil are well suited to the growth of rice, rubber, coffee, coconut, areca-nut, cashew nut, fruits and spices. Among fruits lemon, mango, guava, orange, custard apple, pineapple and banana are extensively grown. The production of rice increased from 11,660 tonnes in 1973-74 to over 13,200 tonnes in 1974-75.

Forests occupy an area of 7,468 sq. km. Important forest products are various types of timber, bamboo and pandanus.

INDUSTRY Timber, furniture making and shell products are the major industries. Plywood, match-splint and oil milling are the other industries. Mat making from pandanus leaves is an important cottage industry. Other cottage industries include leather goods, handicrafts, handlooms and coir making.

Small-scale units manufacturing aluminium products, soap, candles and stainless steel products have come up during recent years.

IRRIGATION AND POWER Irrigation facilities in the territory are negligible. The total installed capacity of power by 31 March 1975 was 3.95 mw. Of 390 villages in the islands, 52 villages excluding the municipal area of Port Blair had been electrified by 31 March 1975 as compared to nil in 1951.

GOVERNMENT *Chief Commissioner:* S.M. Krishnatry

High Court The jurisdiction of Calcutta High Court extends over Andaman and Nicobar Islands. For list of judges, see under West Bengal.

Public Service Commission Recruitment is made through the Union Public Service Commission.

Chief Secretary: D.C. Misra

ARUNACHAL PRADESH

Area: 83,578 sq. km[2] *Population:* 4,67,511
Capital: Itanagar

AGRICULTURE Nearly 46 per cent of the population of Arunachal Pradesh is engaged in agriculture. Irrigated area forms 17 per cent of the total cultivated area or about 14,000 hectares. The traditional method of agriculture is *jhuming*, a kind of shifting cultivation. The forests are cleared and crops are raised for one to three years, depending on the fertility of the soil. Thereafter, the cultivators move on elsewhere. However, sedentary cultivation is followed in the valleys and terraces,

[1]As on 1 January 1966.
[2]As re-organised on 21 January 1972 according to North Eastern Areas (Re-organisation) Act 1971.

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the methods being called 'wet rice cultivation' and 'terrace rice cultivation' respectively. Main crops are rice, maize, millets, wheat and mustard. Forests cover 61,000 sq. km of the area.

INDUSTRY Principal industries are forest-based. Medium and small industries established include saw mills, plywood and veneering mills, rice mills, fruit preservation units, oil expellers besides handloom and handicrafts industries.

IRRIGATION AND POWER There is no major irrigation or power project in Arunachal Pradesh. Four micro-hydel projects at Kalaktang, Rahung, Basar and Pasighat have been commissioned. The total installed capacity in March 1975 was 3.4 mw. Arunachal Pradesh had only seven electrified villages in 1961 and the number increased to 61 by 31 March 1975.

GOVERNMENT *Lt. Governor:* K.A.A. Raja

The Legislative Assembly was inaugurated and the Council of Ministers sworn in on 15 August 1975.

Council of Ministers[1]
Chief Minister: Prem Khandu Thungon
Cabinet Ministers: Tomo Riba, Sobeng Tayang, Tadar Tang and Wangpha Lowang.

Legislative Assembly[1]
Speaker: Nokmey Numati
Deputy Speaker: Padi Yubbe

High Court The jurisdiction of Gauhati High Court extends over Arunachal Pradesh. For list of judges, see under Assam.

Public Service Commission[1] Recruitment is made through special Selection Board constituted by the Union Ministry of Home Affairs in respect of Class I posts.

Chief Secretary: R. Yusuf Ali

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

	District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1.	Kameng	13,724	86,001	Bomdila
2.	Lohit	24,427	62,865	Tezu
2.	Siang	23,723	1,21,936	Along
4.	Subansiri	14,797	99,239	Ziro
5.	Tirap	6,907	97,470	Khomsa

CHANDIGARH

Area: 114 sq. km *Population:* 2,57,251
Capital: Chandigarh

AGRICULTURE Irrigated area covered 45.02 per cent of the total cultivated area during 1974-75. Rice, wheat and maize are the principal food crops grown. The production of foodgrains in 1974-75 was 5,852 tonnes compared to 7,780 tonnes in 1973-74. Forests cover 27.5 per cent of the area.

[1]As on 8 January 1976.

INDUSTRY

There are eight industries in the large and medium sector and 570 units in the small industries sector. The major industries are wool tops and yarn, hosiery needles, electric meters, antibiotics and medicines, bicycle rims, chains and free wheels, card-board and steel furniture. The cottage and small-scale industries include iron and steel re-rolling, steel fabrication, sanitary fittings, door fittings, electronic components, cutlery, fountain pen nibs, machine screw, hardware, electrical appliances, plastic shoes, cotton ginning machine parts, utensils, paints and varnishes, radios and transistors, auto and sewing machine parts, tiles, conduit pipes and rivets, miniature bulbs, insecticides and pesticides, auto cables and domestic cables, thermometers, wire drawing and wire products, soaps and chemicals and cement pipes. An electronics industry complex is being developed and a bakery plant is being put up.

IRRIGATION AND POWER

The total installed power capacity on 31 March 1975 was 51 mw compared to 15 mw in May 1967. All the villages had been electrified by 31 March 1974 as against 14 in 1967. The number of pumpsets/tubewells energised for irrigation was 458 on 31 March 1975.

GOVERNMENT

Chief Commissioner: G.V. Gupta

High Court

The jurisdiction of the High Court of Punjab and Haryana extends over Chandigarh. For list of judges, see under Haryana.

Public Service Commission

Recruitment is made through the Union Public Service Commission.

DADRA AND NAGAR HAVELI

Area: 491 sq. km	*Population:* 74,170
Capital: Silvassa	

AGRICULTURE

Agriculture is the main occupation of the *Adivasis* who comprise 87 per cent of the total population. Rice and ragi are the major food crops, while wheat is also grown in some areas. Main cash crops are oilseeds and sugarcane. About 17,000 hectares of land is under cultivation. Agriculture is dependent on rainfall.

A bull rearing centre and a poultry farm were set up in 1974-75. More than 40 small poultry units belonging entirely to the *Adivasis* have also been started. During the year, a gobar gas plant was set up for the first time in Dadra and Nagar Haveli. A veterinary dispensary and a government poultry farm are already functioning.

Forests occupy 41.5 per cent of the area. Main forest products are timber, khair, sadad, shisam and shivan.

INDUSTRY

There are no major industries. A beginning has, however, been made in this direction by establishing an industrial estate at Piparia near Silvassa. At present, 56 units are working in this industrial estate. Automobile parts, pesticides, opticals, engineering goods, hand-made paper and tanning are some of the industries taken up by these units.

IRRIGATION AND POWER

There is no major or medium irrigation scheme. However, the union territory is participating with the Government of Gujarat in Damanganga reservoir project. Minor irrigation schemes at Khanv and

Bindrabin have been completed. The irrigation scheme at Tigra has been expanded to cover more area.

Power is obtained from Gujarat. Out of 72 villages, 20 had been electrified by May 1975. The number of pumpsets/tube-wells energised was 93.

GOVERNMENT *Administrator:* S.K. Banerji

High Court The jurisdiction of Bombay High Court extends over this union territory. For list of judges, see under Maharashtra.

Public Service Commission Recruitment is made through the Union Public Service Commission.

DELHI

Area: 1,485 sq. km *Population:* 40,65,698
Capital: Delhi

AGRICULTURE Wheat, gram, rice, maize, bajra and jowar are the principal food crops. Small quantities of cash crops, such as, sugarcane, mustard, tobacco and chillies are also grown. Grape cultivation in villages around Delhi has become popular. The production of foodgrains in 1973-74 was 1.06 lakh tonnes as against 1.07 lakh tonnes in the previous year. The fall in production was due to switching over to vegetable cultivation. The area under vegetables in 1974-75 was 23,100 hectares as against 22,300 hectares during 1973-74.

INDUSTRY There were about 34,000 industrial units employing 2,66,000 persons in Delhi in 1974. The total investment in these units was Rs 240 crores and the value of total production was Rs 385 crores. Prominent industries are steel castings, drugs and chemicals, paints and varnishes, television sets, radios, transistors, electrical goods, machine tools and vegetable oils. Other industries include leather and rubber goods, pottery, textiles and tanning. The well-known cottage industries of Delhi are ivory works, gold and silver embroidery, jewellery, brass and copperware.

IRRIGATION AND POWER There is no major irrigation project in Delhi. Only minor works and tube-wells help in irrigation. The total installed capacity in 1974-75 was 273 mw. Delhi has electrified all the villages as against only 24 in 1957. For irrigation, 7,721 pumpsets/tube-wells had been energised by 31 March 1974, while the number was nil in 1951.

GOVERNMENT *Lt. Governor:* Krishan Chand

Executive Council[1] *Chief Executive Councillor:* Radha Raman
Executive Councillors: Hira Singh, O.P. Behl and Krishan Swarup.

Metropolitan Council[1] *Chairman:* Mir Mushtaq Ahmed
Deputy Chairman: Jag Pravesh Chandra

High Court[2] *Chief Justice:* T.V.R. Tatachari

[1] As on 26 November 1975. [2] As on 1 June 1975.

Judges: Jagjit Singh, S.N. Shankar, V.S. Deshpande, S. Ranagarajan, Prakash Narain, Pritam Singh Safeer, M.R.A. Ansari, Vyas Dev Misra, B.C. Misra, Prithvi Raj, D.K. Kapur, T.P.S. Chawla,and A.B. Rohatgi. *Additional Judges:* R.N. Aggarwal, H.L. Anand, Yogeshwar Dayal, F.S. Gill, M.S. Joshi and S.S. Chadha.

Public Service Commission

Recruitment is made through the Union Public Service Commission.

Chief Secretary: J.K. Kohli

GOA, DAMAN AND DIU

Area: 3,813 sq. km	*Population:* 8,57,771
Capital: Panaji	*Principal languages:* Marathi, Konkani and Gujarati

AGRICULTURE

Irrigated area forms about 8.5 per cent of the total cultivated area. Rice is the only important food crop. Production of wheat and groundnuts in recent years has shown encouraging results. Production of rice in 1974-75 was about 72,000 tonnes. Other crops grown in small quantities include ragi, maize, jowar and bajra. The main cash crops are sugarcane, coconut, cashew nut, areca-nut and fruits like pineapple, mango and banana.

Forests cover 27.6 per cent of the total area.

INDUSTRY

The mineral wealth consists of iron ore, manganese, ferro-manganese, bauxite and silica sand. The mining industry contributes substantially to the economy of the territory employing over 25,000 persons. The estimated production of these minerals during 1973-74 was 22,10,688 tonnes. The foreign exchange earning resulting from the export of ores was over Rs 63 crores.

On 31 March 1975 the number of small-scale industries registered was 1,391. They included workshops, bakeries, printing presses, saw mills, tyre retreading units, fruit and fish canning, cashew processing, mosaic tiles, soap manufacture, furniture making and also manufacture of typewriter ribbons, carbon papers, automobile batteries, acrylic sheets, polythene bags, sodium silicate, fishing nets, zip-fasteners, stoves and footwear, spectacle frames, chemical industries, bifocal lenses and stainless steelwares.

There are three government industrial estates already functioning while two more have been constructed.

There are 20 large and medium scale industries. They include a flour mill, a textile mill, a steel rolling mill, brewery plants and a pelletisation plant. A fertilizer project involving an investment of about Rs 58 crores has gone into production.

IRRIGATION AND POWER

Nineteen lift irrigation schemes capable of irrigating about 560 hectares had been implemented till March 1975. Besides, 41 tanks have been renovated and they irrigate about 300 hectares. Eighty-five open type bhandharas have also been constructed to irrigate another 1,170 hectares of land.

The number of electrified villages was 293 in 1975 (31 March) as compared to nil in 1961.

GOVERNMENT *Lt. Governor:* S.K. Banerji

Council of Ministers[1] *Chief Minister:* Smt Shashikala Kakodkar
Cabinet Ministes: A.K.S. Usgaonkar and Pratapsingh R. Rane

Legislative Assembly[1] *Speaker:* N.S. Fugro
Deputy Speaker: C.U. Chodankar

High Court[2] The Judicial Commissioner's Court has been declared as a High Court for the purpose of articles 132 and 134 of the Constitution.
Judicial Commissioner: Tito Menezes

Public Service Commission Recruitment is made through the Union Public Service Commission.

Chief Secretary: T. Kipgen

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

District	Area (sq. km)	Population (1971 census)	Headquarters
1. Daman	72	38,739	Daman
2. Diu	40	23,912	Diu
3. Goa	3,701	7,95,120	Panaji

LAKSHADWEEP

Area: 32 sq. km *Population:* 31,810
Capital: Kavaratti

AGRICULTURE Coconut is the only major crop with a turnover of over Rs 78 lakhs a year. The area under coconut cultivation was 2,760 hectares in 1974-75. There are dairies at Kavaratti and Minicoy and poultry farms at Androth, Kadmat, Kalpeni and Minicoy.

INDUSTRY Fishing is the main industry. The sea around the islands is highly productive. It is particularly rich in tuna and shark varieties of fish. Over 110 mechanised fishing boats are engaged in fishery operations. There is a factory for canning tuna fish at Minicoy Island. There are boat-building yards at Kavaratti and Chetlat.

Coir spinning and coir yarn production are the main cottage industries with an annual turnover of Rs 6 to 7 lakhs. Coir products are exchanged for foodgrains and other consumer goods through government depots. A coir production centre functions at Kadmat and a curled fibre factory at Androth. There is a hosiery unit at Kalpeni. A handicrafts society was started in 1974.

POWER Out of ten inhabited islands, nine had been electrified by 1973-74. The installed capacity of generator sets in Lakshadweep on 31 March 1974 was 841.12 kw.

GOVERNMENT *Administrator:* M.C. Verma

High Court The jurisdiction of the Kerala High Court extends over Lakshadweep. For list of judges, see under Kerala.

Public Service Commission Recruitment is made through the Union Public Service Commission.

[1] As on 15 October 1975. [2] As on 1 June 1975.

MIZORAM

Area: 21,087 sq. km	*Population:* 3,32,390
Capital: Aizawl	*Principal languages:* Mizo and English

AGRICULTURE About 87 per cent of the people of Mizoram are engaged in agricultural pursuits. Irrigated area forms about seven per cent of the total cultivated area. In the hill slopes, maize and paddy are cultivated. Other crops grown are pulses, sugarcane, chillies, ginger, tobacco, vegetables, turmeric, potato, banana and pineapple. Shift cultivation is ordinarily practised though terrace rice cultivation and wet rice cultivation practices have been taken up in recent years. Production of foodgrains in 1974-75 was about 92,400 tonnes; ginger (dry) 1,133.4 tonnes; sugarcane 11,400 tonnes and potato 1,200 tonnes.

Forests cover 20 per cent of the area. Important forest products are timber, bamboo and *agar*

INDUSTRY There is no major industry in Mizoram. Handloom and handicrafts are the only cottage industries. Rice milling, oil and flour milling, mechanised bamboo workshops, saw milling, brick making, aluminium casting and furniture workshops are some of the small industries which have been established. A survey conducted in 1973-74 has established that there is sufficient raw material for establishing a paper-pulp project.

IRRIGATION AND POWER Schemes like the cementing of water points, construction of small reservoirs at the collection points in the streams or springs and some improvised way of bringing water as near the villages as possible are being implemented. Irrigation is difficult because of the mountainous terrain.

There are five diesel power stations to generate electricity mainly for domestic consumption at Aizawl, Lunglei, Kolasib, Serchhip and Hnahthial. The total power generation capacity was estimated to be about 1.3 mw in 1973-74.

GOVERNMENT *Lt. Governor:* S.K. Chibber

Council of Ministers[1]

Chief Minister: Chalchhunga.
Cabinet Ministers: J. Lalsangzuala, Ch. Saprawnga, R. Thangliana, and H. Thansanga
Deputy Ministers: P.B. Nikhuma and Zalawma.

Legislative Assembly[2]

Speaker: Vaivenga
Deputy Speaker: Hiphei

High Court The jurisdiction of Gauhati High Court extends over Mizoram. For list of judges, see under Assam.

Public Service Commission Recruitment of class I and II officers is made by the Lt. Governor.

Chief Secretary: Surendra Nath

[1]As on 18 October 1975. [2] As on 8 November 1975.

PONDICHERRY

Area: 480 sq. km	*Population:* 4,71,707
Capital: Pondicherry	*Principal languages:* Tamil and French

AGRICULTURE

Nearly 45 per cent of the population of Pondicherry is engaged in agricultural and other allied pursuits. Irrigated area forms about 78 per cent of the total cultivated area. Rice is the main food crop. Other crops grown in small quantities are jowar, bajra and ragi. Sugarcane, groundnut and cotton are the principal cash crops. Production of foodgrains in 1973-74 was 1.2 lakh tonnes and sugarcane two lakh tonnes. Forests are practically non-existent.

INDUSTRY

Textiles, sugar, electrical appliances, camphor, leather goods, wooden articles, electronic items, plastics, steel furniture and bicycle parts are the main industries. The government distillery at Pondicherry was expanded in 1973.

IRRIGATION AND POWER

There is no major irrigation project in Pondicherry. Some minor irrigation schemes include boring of wells.

There are no power generation projects. All the 333 villages had electricity by 31 March 1974 as against only 72 in 1971. For irrigation, 6,409 pumpsets/tube-wells had been energised by March 1975.

GOVERNMENT

Lt. Governor: Chhedi Lal

The Union Territory came under President's rule on 29 March 1974.

Legislative Assembly[1]

Speaker: S. Pakkiam

High Court

The jurisdiction of Madras High Court extends over Pondicherry. For list of judges, see under Tamil Nadu.

Public Service Commission

Recruitment is made through the Union Public Service Commission.

Chief Secretary: M. Chandramouli

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

District	*Area (sq. km)*	*Population (1971 census)*	*Headquarters*
1. Karaikal	161	1,00,042	Karaikal
2. Mahe	9	23,134	Mahe
3. Pondicherry	290	3,40,240	Pondicherry
4. Yanam	20	8,291	Yanam

[1] As on 1 July 1975

26 IMPORTANT EVENTS

1975
JANUARY

1 The first five all-women post offices in the country inaugurated at Pune marking the commencement of the International Women's Year.
— Sheikh Zayed Bin Sultan al-Nahyan, President of the United Arab Emirates, arrives in New Delhi.
— In a joint communique issued at the end of the visit of the Portuguese Foreign Minister Dr Mario Soares, India and Portugal agree to promote cooperation in economic, technical and cultural fields.
— India lifts embargo on trade with Portugal.
— J. Sivashanmugam Pillai, former Speaker of the composite Madras Assembly, passes away in Madras.
2 Prime Minister Indira Gandhi takes over the Planning portfolio.
— Railway Minister L. N. Mishra injured in a bomb explosion at Samastipur at the inauguration ceremony of the Samastipur-Muzaffarpur rail link.
3 L. N. Mishra succumbs to his injuries at the Danapur railway hospital.
— In New Delhi, India and the United Arab Emirates exchange letters for the establishment of a joint commission on economic, technical and cultural cooperation.
4 P.N. Haksar takes over as Deputy Chairman of the Planning Commission.
— The Bharatiya Lok Dal (BLD) recognised as a national party for the purpose of alloting a permanent election symbol.
5 Mauritius Prime Minister Sir Seewoosagar Ramgoolam arrives in Bombay on a ten-day visit to India.
6 In a joint communique, India and the United Arab Emirates stress the importance of keeping the Indian Ocean as a zone of peace.
9 India and Mauritius sign in New Delhi an agreement under which Mauritius will receive a Rs 5-crore loan and a Rs 10-crore commercial credit.
10 The first World Hindi Convention inaugurated at Nagpur.
11 Oil struck in the third well at Bombay High.
— Prime Minister Indira Gandhi inaugurates the all-weather New Mangalore port.
12 Shrimati Indira Gandhi arrives in Maldives, the first Indian Prime Minister to visit the island country.
— The Fifth International Film Festival concludes in New Delhi; Hungarian feature film "Dreaming Youth", directed by Janos Rosha, awarded the 'Golden Peacock'.
13 An oil industry development board set up.
14 India and Maldives in a joint communique call upon the super powers to refrain from any action which militates against the objective of keeping the Indian Ocean as a zone of peace.
— Foundation-stone of the Vishwa Hindi Vidyapeeth laid at Wardha.
— India and Mauritius in a joint communique deplore the setting up of any military base on the island of Diego Garcia.
15 Rashidi Mfaume Kawawa, Tanzanian Prime Minister and second Vice-President, arrives in New Delhi.

— *The Statesman* celebrates its centenary.
— India and Pakistan sign in New Delhi a protocol for the resumption of direct shipping services after a lapse of about a decade.
17 India and Tanzania exchange in New Delhi letters to set up a joint commission at ministerial level for economic, technical and scientific cooperation.
— At Lucknow, India loses to New Zealand in the Eastern Zone Davis Cup tie.
— India's first micro-computer, Moscal 1080 PS, launched in New Delhi.
18 Prime Minister Indira Gandhi arrives in Baghdad on a three-day visit to Iraq.
19 Strong earthquake in Himachal Pradesh causes loss of life and damage to property.
21 India and Iraq in a joint communique stress the importance of keeping the Indian Ocean as a zone of peace.
— At Jabalpur, Sharad Yadav, an Independent, wins the Lok Sabha by-election, with a majority of over 87,000 votes against his Congress rival.
— In a joint communique, India and Tanzania lay stress on the maintenance of the Indian Ocean as a zone of peace.
23 India and Pakistan sign in Islamabad a one-year trade agreement.
— Dr Kenneth David Kaunda, President of Zambia, arrives in New Delhi.
25 The Jawaharlal Nehru award for Promotion of Peace and International Understanding for 1970 presented to President Kaunda.
26 India and Zambia sign in New Delhi three agreements on co-operation in the economic, technological and cultural spheres.
29 West Bengal Relief Minister, Santosh Roy and the Deputy Minister for Irrigation and Power, Suniti Chattoraj, resign following the Report of the Wanchoo Commission which found them guilty of charges of corruption.
— At Bombay, India loses the fifth and final cricket test and the rubber to West Indies.

FEBRUARY

2 Dr S.V.S. Shastry, project co-ordinator of the All India Co-ordinated Rice Improvement Project, awarded the 1974 Borlaug Award for outstanding work in agriculture.
— In New Delhi, 19-year-old Sat Pal of Delhi wins the 'Bharat Kesari' title in wrestling.
5 Prime Minister Indira Gandhi commissions 31,000-tonne smelter at the Khetri copper complex.
— Foundation stone for the advanced level Telecommunications Training Centre laid at Ghaziabad.
6 The union government appoints a commission headed by Justice K.K. Mathew, a judge of the Supreme Court, to inquire into the circumstances of the death of L.N. Mishra.
— Mary Clubwala Jadhav, social worker, dies in Bombay.
7 The Third Triennale India inaugurated in New Delhi.
10 The nation's highest award, the 'Bharat Ratna', conferred on former President V.V. Giri.
12 India and Yugoslavia sign in New Delhi a five-year agreement on scientific and technological cooperation.
15 Direct Indo-Pak shipping links restored.
16 National Women's Day celebrated.

18 India and the Soviet Union sign in New Delhi a five-year agreement for cooperation in the fields of geo-sciences, physics, chemistry, biology and mathematics.

21 Maharashtra's new Council of Ministers, led by S.B. Chavan, sworn in at Bombay.

22 Jammu and Kashmir Congress Legislature Party unanimously endorses the accord between the centre and Sheikh Abdullah on the future set-up of the state; Chief Minister Syed Mir Qasim submits resignation of his Ministry.

23 Ismail Hussain Khan (Congress) declared elected to Lok Sabha in the Barpeta by-election in Assam.

— R.N. Singh Deo, former Chief Minister of Orissa, dies in Bombay.

25 A new Jammu and Kashmir Cabinet headed by Sheikh Abdullah sworn in at Jammu.

26 Sahitya Akademi awards presented to seventeen writers.

— India and Australia sign at New Delhi a five-year agreement on cooperation in science and technology.

28 India and Sri Lanka sign in New Delhi a five-year agreement on science and technology.

MARCH

1 Sikkim becomes an associate state of the Indian Union.

— India and Iraq sign in New Delhi an agreement to collaborate, among other things, in petroleum research.

2 Mohan Dharia, Minister of State for Works and Housing, resigns from the Union Council of Ministers.

5 India and France sign agreement in New Delhi on cooperation in the field of off-shore drilling for oil, power generation and transmission.

6 Rally led by Jayaprakash Narayan held in Delhi; charter of demands presented to Speaker of Lok Sabha and Chairman of Rajya Sabha.

7 Report of the Fact Finding Committee on Newspaper Economics presented to Parliament.

— Sir Kamisese Mara, Prime Minister of Fiji, arrives in New Delhi.

10 Naga National Organisation ministry headed by John Bosco Jasokie, sworn in at Kohima.

— Mohammad Daoud, President of Afghanistan, arrives in NewDelhi.

11 President's rule in Gujarat extended by six months.

13 Parliament approves the Kashmir accord between the centre and Sheikh Abdullah.

14 Indo-Afghan joint communique notes with "regret" the recent actions "which would stimulate an arms race and encourage the forces of confrontation and tension in South Asia."

15 India wins the Third World Cup hockey tournament at Kuala Lumpur, defeating Pakistan 2-1.

18 Shrimati Indira Gandhi gives evidence in the Allahabad High Court in the hearing of an election petition challenging her election to Lok Sabha from Rae Bareli in 1971.

— Dr Hari Ramachandra Divekar, Sanskrit scholar and freedom fighter, dies in Pune.

19 India and the Soviet Union sign in New Delhi a "working programme" for applied science and technology for 1975-80.

20 A Rs 20-crore rocket propellants and ballistics project at the Bhandara ordnance factory inaugurated.

— Chief Justice of India, A.N. Ray, escapes unhurt as two grenades thrown into his car in New Delhi did not explode.

22 President's rule proclaimed in Nagaland.
23 Manufacture completed by BHEL of a 236-mw steam turbine, the biggest in the country so far, for the Kalpakkam nuclear power station.
— The 42nd Miners' International Congress begins in New Delhi.
— At Bangalore, Chamba Muthnal of Karnataka wins the 'Hind Kesari' title in wrestling.
24 Musiri Subramania Iyer, Karnatak musician, passes away in Madras.
26 Parliament approves imposition of President's rule in Nagaland.
30 The 22nd Filmfare awards presented in Bombay.
31 The fourth and the fifth unit, each of 120 mw, of Chandrapura thermal power house of DVC, inaugurated, raising its total installed capacity to 660 mw, the country's highest and Asia's second highest installed capacity.

APRIL

1 India accords full diplomatic recognition to the Cambodian Government headed by Prince Sihanouk.
2 Bombay regains Ranji Trophy, defeating holders Karnataka, in Bombay.
4 The Indian Register of Shipping inaugurated at Bombay.
7 Morarji Desai begins an indefinite fast in New Delhi in support of his demands.
— Bihar Chief Minister Abdul Ghafoor resigns.
10 The Sikkim Assembly adopts a resolution abolishing the institution of Chogyal and seeking for Sikkim the status of a constituent state of the Indian Union.
— Prime Minister Indira Gandhi inaugurates trial production of crude oil at the fourth well in Bombay High.
11 New Bihar Ministry headed by Dr Jagannath Mishra sworn in at Patna.
12 The first World Telugu Conference inaugurated at Hyderabad by Vice-President B.D. Jatti.
13 Prime Minister informs Morarji Desai of Government's decision to hold Assembly elections in Gujarat around 7 June; Morarji Desai ends his fast.
— Foundation-stone of the Rs 25-crore giant automobile tyre and tube project in Chalakudy laid.
— 'Bharat Kesari' Sat Pal of Delhi wins the Rustom-e-Bharat title in wrestling at Kolhapur.
15 Results of a special poll held on 14 April show the Sikkimese voted overwhelmingly in favour of abolition of the institution of Chogyal and for securing for the territory the status of a constituent state of the Indian Union.
— The first general cargo berth at Paradip port formally opened.
17 Dr Sarvepalli Radhakrishnan, former President of India, passes away in Madras.
— Khandubhai Desai, labour leader and former Governor of Andhra Pradesh, dies in Ahmadabad.
19 'Aryabhata', the first Indian satellite, launched from the Soviet Union.
22 India takes over the control of 'Aryabhata'.
23 India and the Soviet Union sign in Moscow an agreement for the second stage of space cooperation.
24 The 2,500th anniversary of Lord Mahavira's Nirvana observed.
26 Sikkim becomes a full-fledged state of the Indian Union with the

passage of the Constitution (Thirty-sixth Amendment) Bill by Parliament. (The President gave assent to the Act on 16 May 1975 making it operative with retrospective effect from 26 April).

— Liner service between India and Mauritius inaugurated in Bombay.

28 Prime Minister Indira Gandhi arrives in Kingston, Jamaica, to attend the Commonwealth Prime Ministers' Conference.

30 India accords full diplomatic recognition to the Provisional Revolutionary Government of South Vietnam.

MAY

1 Commercial broadcasting services from Bhopal, Cuttack, Indore, Jaipur, Jodhpur, Patna and Trivandrum, begin.

2 Miss Padmaja Naidu, former Governor of West Bengal, passes away in New Delhi.

4 The second oil jetty at Kandla port commissioned.

5 State Bank of India's first branch in Bangladesh inaugurated at Dacca.

6 Peter Alvares, trade Union leader, dies at Chinchwad, near Pune.

9 India's first electric typewriter released by the Hindustan Teleprinters Limited, a public sector undertaking.

13 Damuanna Malvankar, comedian of Marathi stage and screen, dies in Bombay.

15 Railways beat Tamil Nadu 5—0 and retain the Rangaswami Cup in the National Hockey Championship at Bhopal.

16 B.B. Lal sworn in as Sikkim's first Governor at Gangtok.

— A six-member Council of Ministers headed by Chief Minister Kazi Lhendup Dorji sworn in at Gangtok.

19 Korba plant in Madhya Pradesh, the first public sector aluminium smelter in India starts producing ingots.

20 Nagaland State Assembly dissolved.

23 Vice-President B.D. Jatti arrives in Dar-es-Salaam, Tanzania on a seven-day official visit.

24 The first public sector rubber processing unit opened at Vettilappara in Kerala.

25 Sikkimese woman, Phigu Bhutia, scales 5,400-metre high peak in Darjeeling.

26 President Fakhruddin Ali Ahmed arrives in Jakarta on a five-day state visit to Indonesia.

— The first all-woman printing press inaugurated in Delhi.

— The 37-day old strike of the Maharashtra Government and Zila Parishad employees called off.

30 B.N. Mandal, a BLD member of the Rajya Sabha, dies at Madhepura in Bihar.

JUNE

1 Gen T.N. Raina takes over as Chief of the Army Staff.

— Punjab Mata Smt Vidyawati, mother of Shaheed Bhagat Singh, passes away in New Delhi.

2 Country's first sponge iron plant with a capacity of 100 tonnes per day inaugurated at Vijayawada.

— K. Srinivasan, journalist, dies at Ootacamund.

4 India and Portugal sign in Lisbon a treaty recognising India's sovereignty over the former Portuguese enclaves of Goa, Daman and Diu and Dadra and Nagar Haveli.

— India and the Soviet Union exchange in New Delhi letters of agreement for cooperation in the Calcutta tube railway project.

— Ram Singh, editor of *Thought*, dies in New Delhi.

7 It is announced that the National Film Awards function would be

known as the National Film Festival with "Lotus" the national flower, as its symbol.

— Kunnikkal Narayanan, Naxalite leader, arrested at his residence in Kozhikode.

8 Election to the Gujarat Legislative Assembly begins.

— Delhi's Sat Pal crowned "Rustum-e-Hind" in the 25th National Wrestling Championship at Pune.

10 Foundation-stone of the public sector Kerala newsprint mill laid at Velloor.

11 Polling in Gujarat concludes.

12 Mr Justice Jagmohanlal Sinha of the Allahabad High Court delivers judgment on the election petition filed by Raj Narain in April 1971; sets aside the election of Shrimati Indira Gandhi; grants absolute stay of operation of the judgment for 20 days.

— D.P. Dhar, Ambassador to the Soviet Union passes away in New Delhi.

13 Leaders of non-CPI opposition parties begin a dharna in front of Rashtrapati Bhavan

— Results of the election to the 182-member Gujarat Legislative Assembly declared; Janata Front wins 86 seats, Indian National Congress 75, Kisan Mazdoor Lok Paksha 12 and Independents 8.

15 Prof K.A. Nilakantha Sastri, historian, dies in Madras.

18 The Congress Parliamentary Party unanimously passes a resolution expressing its fullest faith and confidence in Shrimati Indira Gandhi and voicing its firm belief that her continued leadership as Prime Minister is indispensable for the nation.

— President's rule in Gujarat revoked; Babubhai Jashbhai Patel sworn in as Chief Minister.

19 The Press Trust of India and Prensa Latina of Cuba start exchanging news marking the first news exchange link-up between India and Latin America.

— Seventeen ministers of cabinet rank of Gujarat's Janata Front Ministry sworn in at Ahmadabad.

20 Prime Minister Indira Gandhi files application in the Supreme Court, seeking an absolute and unconditional stay of the operation of the Allahabad High Court judgment of 12 June 1975 pending final disposal of her appeal.

— The Prime Minister addresses a mammoth rally in New Delhi in support of her policies and leadership.

23 Gen P.N. Thapar, former Chief of Army Staff, dies in New Delhi.

— Dr Bharat Bhushan Aggarwal, Hindi poet and former secretary of Sahitya Akademi, dies in Simla.

24 The Vacation Bench of the Supreme Court grants Prime Minister Indira Gandhi stay of the operation of the Allahabad High Court judgment and declares she can continue to function as Prime Minister and take part in Parliamentary proceedings without the right to vote pending the disposal of her appeal by the Court. The stay order, declares Justice V.R. Krishna Iyer, substantially preserves her position as member of Parliament and does not adversely affect her position as Prime Minister.

25 Non-CPI opposition parties led by Jayaprakash Narayan announce a programme of countrywide agitation to force the Prime Minister to resign.

— The President declares a state of grave emergency due to existence of a threat to the security of India from internal disturbance.

26 In a broadcast to the nation the Prime Minister says the action of a few are endangering the rights of the vast majority and the country's integrity demands firm action.
— Preventive arrests made at various places. Life normal throughout the country.
28 Kundanlal Dholkia, Congress (O) member from Bhuj, elected Speaker of Gujarat Assembly.
— The first phase of the Rajasthan canal project completed.
29 The President issues an ordinance amending the Maintenance of Internal Security (Amendment) Act under which no grounds need be given for detention.

JULY

1 Prime Minister Indira Gandhi, in a broadcast to the nation, announces a package of economic measures—the 20-Point Economic Programme.
— Special deposit scheme for industrial and other workers with tax-free interest at 10 per cent per annum comes into force.
— Ordinance issued amending the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act to lay down that persons detained under the Act need not be given grounds for detention and that such detentions need not be referred to any advisory board during the Emergency.
2 Alleged top smugglers including Yusuf Patel, Sukur Naran Bakhia and Nainmal Punjaji Shah detained in various parts of the country.
4 The union government bans 26 organisations and groups including the Rashtriya Swayamsevak Sangh, the Jamaat-e-Islami-e-Hind, the Anand Marg and Naxalite groups.
— Sheikh Abdullah and Mirza Afzal Beg declared elected to the Jammu and Kashmir Assembly.
— At Srinagar, the Plebiscite Front decides to dissolve itself and merge with the revived National Conference.
— India signs agreement for establishing the Association of Iron Ore Exporting countries.
— Ragging in colleges all over India prohibited.
6 Acharya Vinoba Bhave welcomes declaration of emergency as an era of discipline.
9 Special income-tax squads appointed in four metropolitancities to check up investment of black money in luxury houses.
14 Madan Mohan, film music director, dies at Bombay.
15 Arthur Chung, President of Guyana, arrives in New Delhi on a ten-day visit.
16 Ordinance issued to further amend the Maintenance of Internal Security Act. It says no person including a foreigner detained under the Act can claim a right to personal liberty by virtue of natural or common law.
19 India and Libya sign in Tripoli an oil agreement for technical cooperation, exchange of expertise and mutual help in carrying out development projects in the two countries.
21 Monsoon session of Parliament begins.
— Luis Echeverria Alvarez, President of Mexico, arrives in New Delhi.
22 The Rajya Sabha approves proclamation of internal emergency by 136 votes to 33.
23 The Lok Sabha approves proclamation of internal emergency by 336 votes to 59.

— In New Delhi, India and Mexico in a joint communique express concern over military escalations in the Indian Ocean and call for continued efforts by all towards the objective of keeping the Ocean as a zone of peace.
— India and Mexico sign agreements on scientific and cultural co-operation.
— P. Kodanda Rao, educationist, author and social worker, dies in Bangalore.
— A five-member all-Congress Ministry headed by Rajkumar Dorendra Singh sworn in at Imphal.
24 Muhammed Khuda Buksh, a member of the Lok Sabha from West Bengal, dies in New Delhi.
29 India recognises the Comoro Islands.
30 Parliament passes Taxation Laws (Amendment) Bill making various direct taxation acts more stringent.
— Shrimati Gayatri Devi, member of the Lok Sabha, arrested under the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act.
31 The President gives assent to the Finance (Amendment) Act raising the income-tax exemption limit from Rs 6,000 to Rs 8,000.

AUGUST

1 Prime Minister Indira Gandhi inaugurates Satellite Instructional Television Experiment (SITE) programme.
— The President gives assent to the Constitution (Thirty-eighth Amendment) Act 1975 making President's power to declare emergency and to promulgate ordinances non-justiciable.
— The President gives assent to the Conservation of Foreign Exchange and Prevention of Smuggling Activities (Amendment) Act 1975 making it operative from 1 July 1975.
— Sadhu Ram, Congress Member of Parliament, dies at Phagwara in Punjab.
3 Amarendra Nath Bose, revolutionary and Forward Bloc (Marxist) leader, dies in Calcutta.
5 The President gives assent to the Maintenance of Internal Security (Amendment) Act 1975 making Section 7 of the Act operative from 25 June 1975 and the remaining provisions of the Act from 29 June 1975.
— Hanumant Sahai, freedom fighter, dies in New Delhi.
6 The President gives assent to the Election Laws (Amendment) Bill to provide, among other things, that a person would be deemed to be a candidate only from the date of filing nomination papers.
— The five-member Indo-German Indus boat expedition from Leh to Khalsi achieves success.
7 The Lok Sabha adjourns *sine die*.
8 India and Sri Lanka sign in New Delhi an agreement under which India will provide a loan of Rs 10 crores to set up a fertiliser project in Sri Lanka.
9 The Rajya Sabha adjourns *sine die*.
— Calcutta TV centre inaugurated.
10 The President assents to the Constitution (Thirty-ninth Amendment) Act empowering Parliament to set up a new forum for resolving disputes relating to elections of President, Vice-President, Prime Minister and Speaker.
11 Bibhuti Ghosh, Forward Bloc leader and associate of Netaji Subhas Chandra Bose, dies in Calcutta.
— K.A.A. Raja appointed Lt Governor of Arunachal Pradesh.

13 James Mancham, Chief Minister of Seychelles islands, arrives in New Delhi.
— Union Cabinet adopts the ILO convention granting equal pay for equal work for men and women.
15 In Arunachal Pradesh, Legislative Assembly is inaugurated and Council of Ministers sworn in.
— Madras TV centre commissioned.
— Memo Bai, veteran woman freedom fighter, dies.
23 India extends to Nepal standby credit facility of Rs 10 crores.
— Five additional instalments of dearness allowance for central government employees announced.
— Pandit Vinayakrao Patwardhan, classical Hindustani musician, dies in Pune.
25 Hearing of Prime Minister's election case appeal begins in the Supreme Court.
— Patna hit by the worst floods in memory.
26 Dr N.S. Hardikar, founder of the Hindustani Seva Dal, dies at Ghataprabha, Karnataka.
27 India and Peru sign in Lima an agreement for cooperation in the fields of science and technology.
29 The second unit of the Santaldih thermal power station in West Bengal commissioned.
31 B.G. Verghese, journalist, receives in Manila the 1975 Ramon Magsaysay Award for journalism, literature and creative communication arts.

SEPTEMBER

1 Tarapada Chakraborty, Hindustani classical musician, dies in Calcutta.
3 In West Bengal, an ordinance is issued providing for total debt relief to landless labourers and the poorest sections of the peasantry.
4 Dr Baldev Prasad Mishra, Hindi scholar and member of the Madhya Pradesh Assembly, dies at Rajnandgaon in Madhya Pradesh.
5 Appointment of sole selling agents for sugar and vanaspati by any company banned for five years.
— ALTRUSA, an international welfare body of women with its headquarters in Chicago opens the Delhi "chapter" (branch) with Shrimati K. Lakshmi Raghuramiah as its first president.
6 The Meghalaya Government fixes minimum wages of agricultural labourers.
8 In Hyderabad, President Fakhruddin Ali Ahmed opens the International Telugu Institute.
9 An ordinance is promulgated to amend the Income Tax Act and abolish the ceiling on amount of donations to the Prime Minister's National Relief Fund and other charities, qualifying for tax relief.
— Maulana Shahid Fakhri, freedom fighter, dies in Allahabad.
10 King Jigme Singye Wangchuk of Bhutan arrives in New Delhi.
— In Rajasthan, an ordinance is promulgated making bonded labour a cognisable and non-bailable offence.
11 India and Hungary sign in Budapest a protocol on economic, scientific and technical cooperation.
13 In Andhra Pradesh, an ordinance is promulgated to amend the land acquisition act to speed up acquisition and to enable the government to provide more house sites to the poor.

— The Indian Space Research Organisation and the Soviet Academy of Sciences sign an agreement to launch a second satellite from a Soviet cosmodrome sometime in 1977-78.

14 Vijay Amrithraj of India beats Ilie Nastase of Rumania to win the men's singles event in the Charlottee Tennis Tournament at Charlottee (North Carolina), USA.

15 India and Hungary sign in Budapest two protocols for increased cooperation in agriculture and water management.

16 India recognises the new independent state of Papua, New Guinea.

17 S. Natarajan, former editor of the *Free Press Journal,* dies in Bombay.

— The third and the last unit of the Obra Thermal Station extension stage-I in Mirzapur district of Uttar Pradesh inaugurated.

18 The Company Law Board prohibits the appointment of sole selling agents for cement and paper for five years.

— The union government decides to delicense certain industries for which necessary machinery and raw materials are indigenously available.

— Bihar decides to give representation to workers in the boards of directors of different corporations in the state.

— The central government announces drastic cut in the excise duty on naphtha used in manufacture of industrial ammonia and methanol.

19 The union government announces decision to form a holding company—Coal India Ltd—to manage the nationalised coal industry.

— The second unit of the Guru Nanak thermal plant at Bhatinda inaugurated.

21 The first oil well spudded in the Bengal basin at mid-night of September 21-22.

22 S.K. Rai, General Secretary of the Sikkim Congress, declared elected to the Lok Sabha as Sikkim's representative.

— Vijay and Anand Amrithraj win the Pacific South Western Tennis Championship doubles crown.

24 The link between the rupee and the pound sterling snapped.

— The central government formulates a Rs 25-crore scheme to assist landless labourers and scheduled castes and scheduled tribes benefiting from land reforms in the cultivation of their lands.

— India and the Soviet Union sign in Moscow contracts for the supply of equipment for the Mathura refinery.

— A. Venkatasubba Rao, Telugu writer and film producer, popularly known as 'Chakrapani', dies in Madras.

25 The government issues ordinance reducing the minimum bonus of workers to 4 per cent and defines the concept of bonus as being payable in future only on the basis of profits, production or productivity. No bonus will be paid if there is no surplus at all.

26 The President promulgates three ordinances: (i) to ensure equal wages to men and women for the same work, (ii) to establish rural banks in the country for meeting the credit needs of farmers and (iii) to promote speedier movement of public carriers through grant of national permits.

— A direct satellite telephone link established between India and the Soviet Union.

— President Fakhruddin Ali Ahmed arrives in Budapest from New Delhi on a four-day state visit to Hungary.

— Rohini-300, a single stage sounding rocket, developed at the Vikram Sarabhai Space Centre, Trivandrum, successfully flight-tested from Thumba.
27 Professor T.R. Seshadri, FRS, scientist of international repute dies in New Delhi.
28 President's rule in Pondicherry extended by another six months.
— The Jnanpith literary award for 1974 awarded to the Marathi novelist, V.S. Khandekar for his novel "Yayati".
— Film director B. Narasimha Reddi selected for the 1975 Dadasaheb Phalke Award.
29 India beat Thailand in the first round of the Davis Cup Tennis Tournament at Amritsar.
— Government decides to maintain the status quo in respect of procurement prices of paddy and coarse grain.
30 King Birendra and Queen Aishwarya of Nepal arrive in New Delhi on a day's visit.
— President Fakhruddin Ali Ahmed arrives in Yugoslavia on a five-day official visit.
— In a joint communique issued at the conclusion of the visit of President Fukhruddin Ali Ahmed to Hungary, both the countries reaffirm their identity of views on the need to make the Indian Ocean a zone of peace.
— A postal bank, patterned on commercial banks, opened in New Delhi.
— Solomon Tshering declared elected to the Rajya Sabha from Sikkim.

OCTOBER

1 According to a Government survey, industrial production in the first quarter of 1975-76 is estimated to have increased by 5 to 6 per cent.
2 Five regional rural banks opened at Moradabad and Gorakhpur in Uttar Pradesh, Bhiwani in Haryana, Jaipur in Rajasthan and Malda in West Bengal.
— The union government announces a 12-point minimum programme to reduce the consumption of alcoholic beverages and to prepare ground for total prohibition in the country.
— Bonded labour banned in Madhya Pradesh by an ordinance.
— K. Kamaraj, great freedom fighter, former Chief Minister of Tamil Nadu and former President of the Indian National Congress passes away in Madras.
3 The President issues an ordinance arming the railway authorities with powers to dispose of by auction such consignments as are not removed by the consignees within seven days of termination of transit.
4 In a joint communique issued at the end of President Fakhruddin Ali Ahmed's visit to Yugoslavia, both countries stress the urgency of ensuring that the Indian Ocean remains a zone of peace.
— The Kerala Governor inaugurates the trial run of the first generator of the Rs 110-crore Idukki hydel project.
6 Chief Ministers of Maharashtra and Andhra Pradesh sign in Hyderabad an agreement on the sharing of the Godavari waters.
— The second meeting of the joint Indo-US Commission convened in Washington.
7 India and the United States, in a joint communique issued at the end of the two-day meeting of the Indo-US Joint Commission,

agree on a wide-ranging programme for economic, scientific and cultural co-operation.

— Dr. D.V. Gundappa, Kannada author and journalist, dies in Bangalore.

8 Under a new scheme promulgated through a Presidential ordinance tax-evaders are to get a reprieve till 31 December for voluntary disclosure of unaccounted taxable income and wealth.

10 Oil has been struck in the very first well drilled in the Bay of Bengal, 130 km east of Balasore in Orissa.

— Himachal Pradesh Government allots house sites to all homeless families in rural areas. It has already allotted five-bigha plots to all landless agricultural workers.

— Satyajit Ray chosen by the British Federation of Film Societies as the most distinguished international film director of the last half century.

— The third watch production unit of the Hindustan Machine Tools inaugurated at Zainakoot near Srinagar.

— The President assents to the West Bengal Rural indebtedness Bill, the Kerala Debtors (Temporary Relief) Bill and the bill for the abolition of bonded labour.

11 A 16-member legal aid board under the chairmanship of Bihar Chief Minister launches a massive legal aid programme to throw open the doors of justice to lakhs of people living below the poverty line.

14 Dzemal Bijedic, Prime Minister of Yugoslavia, arrives in New Delhi.

15 About four lakh women in the plantation industry start getting wages equal to men.

— Christavao Furtado, freedom fighter and founder of the United Goans Party, dies in Panaji.

16 The Indo-Yugoslav joint communique underlines the role of non-alignment for detente, the urgent need for stability in Asia, freedom from great power rivalry in the Indian Ocean and bilateral discussions for a durable peace in the sub-continent.

17 The Maintenance of Internal Security Act amended by an ordinance forbidding disclosure of the grounds of detention or material or information on which such grounds are framed.

20 Four members of an Indian border patrol killed in an ambush by Chinese soldiers well within Indian territory.

— Karnataka promulgates an ordinance abolishing bonded labour.

23 The union government issues a notification under the Defence of India Rules making it more difficult for arrested smugglers to secure release on bail.

24 A Presidential ordinance declares bonded labour illegal with immediate effect.

25 The union government delicenses 21 industries in the medium sector and permits them to produce as much as possible from existing units regardless of their licensed capacity.

26 Oil has been struck in a well at Kharsangh in Arunachal Pradesh.

28 Twenty-first Commonwealth Parliamentary Conference inaugurated by the President.

30 The union government announces a scheme of workers' participation at shop floor and factory levels in manufacturing and mining industries in the public, private and co-operative sectors.

31 Sardar Patel's birth centenary celebrated.

— Sachin Dev Burman, music composer and director, passes away in Bombay.

NOVEMBER

1 India and Afghanistan sign in Kabul an economic agreement under which India will assist Afghanistan in several fields of development.
4 An ordinance is promulgated providing for the imposition of heavy penalties for misuse of import and export licences.
5 Another ordinance is issued for the confiscation of illegally acquired property of smugglers, foreign exchange manipulators, and their friends and associates.
7 The Supreme Court unanimously upholds the election of Prime Minister, Shrimati Indira Gandhi, to the Lok Sabha from the Rae Bareli constituency in 1971 and sets aside the judgment of the Allahabad High Court.
— In Chicago, the National Association for Public and Adult Education of USA confers on Prime Minister Indira Gandhi the international women's award in adult education.
11 Accord on "basic issues" of the Naga problem reached between the union government and the underground Naga representatives.
— The Medical Council of India announces derecognition of all British medical qualifications after March 1977.
— At Hyderabad, India wins the first unofficial cricket test match against Sri Lanka by 8 wickets.
12 Jayaprakash Narain released on parole.
14 The 1974 Jawaharlal Nehru Award for the Promotion of Peace and International Understanding given to Dr Raul Prebisch, Argentine economist.
16 The Maintenance of Internal Security (Fourth Amendment) Ordinance, 1975, issued. It provides that the expiry or revocation of a detention order under the Act shall not bar another detention order against the same person.
— The fourth International Training and Development Conference inaugurated in New Delhi by President Fakhruddin Ali Ahmed.
19 Prime Minister Indira Gandhi lays the foundation-stone of a hospital at Singtham, 28 km from Gangtok.
— The National Sports Festival for Women begins in New Delhi.
— All India Radio wins the Hoso-Bunka Foundation Radio Prize sponsored by the Asian Broadcasting Union General Assembly for 1975 for its entry "Minstrels of Karnataka", a Radio feature based on the folk music of Karnataka.
— One hundred and one Mizo rebels surrender to Lt Governor of Mizoram, at Aizawl.
20 India and Soviet Union sign in Bangalore a protocol on the launching of the second Indian satellite from the Soviet Union in 1978.
— Addressing a huge public rally in Gangtok Prime Minister emphasises that India wants to maintain friendly relations with all countries.
21 In Ahmadabad, India wins the second test against Sri Lanka.
23 Vijay Amrithraj wins the Indian Grand Prix Tennis Championship at Calcutta, defeating Manuel Orantes of Spain.
25 The union government announces major concessions for new sugar factories and for expansion projects of existing factories.
26 Samer Sen, India's High Commissioner to Bangladesh, receives bullet injury in an attempt on his life by six armed men in the chancery premises in Dacca.

— Government and the Burmah Shell sign in New Delhi "memorandum of understanding" which provides for 100 per cent take over of Burmah Shell's refinery in Bombay and its countrywide marketing network by the end of the year.

27 Lucknow TV station, the seventh in the country, goes on the air.

28 India and France sign in New Delhi a programme of cooperation in the fields of education, art and culture, science and technology, mass media, health, agriculture and public administration.

29 H.N. Bahuguna, Chief Minister of Uttar Pradesh, submits resignation.

— India and the UNICEF sign in New Delhi an agreement on a "master plan of operations" for a five-year package programme of services for children.

30 The union Council of Ministers reshuffled—Lok Sabha Speaker G.S. Dhillon and Haryana Chief Minister Bansi Lal appointed Cabinet Ministers, the former as Minister of Shipping and Transport and the latter as Minister without portfolio. Four new Ministers of State appointed. Defence Minister, Swaran Singh and Minister of Shipping and Transport, Uma Shankar Dikshit, Cabinet Ministers, and R.K. Khadilkar, Minister of State for Supply and Rehabilitation and K.R. Ganesh, Minister of State for Petroleum and Chemicals resign.

— President's rule proclaimed in Uttar Pradesh; the State Assembly to remain in a state of suspended animation.

— The union government announces selective increases in the prices of petroleum products including kerosene, cooking gas, high speed diesel oil and furnace oil effective from 1 December.

— India beat Pakistan 5-4 in the Thomas Cup Badminton Asian semi-final played in Lahore.

DECEMBER

1 In New Delhi, two new Cabinet Ministers, Bansi Lal and G. S. Dhillon, sworn in.

— In Chandigarh, Banarsi Dass Gupta sworn in as Chief Minister of Haryana.

— At Nagpur, the third and final unofficial cricket test between India and Sri Lanka ends in a draw. India won the first previous two matches and the series.

2 President Fakhruddin Ali Ahmed arrives in Cairo on an official visit to Egypt.

— India and the UK sign in New Delhi four agreements providing for British grants totalling £ 9.12 crores (Rs 167.7 crores) to India.

— A new textile policy providing for, among other things, a massive programme for the rationalisation and modernisation of the textile industry, announced.

4 The detention order against Jayaprakash Narayan revoked.

5 Producers of indigenous phosphatic fertilisers announce a cut in prices following reduction of import duty on phosphoric acid and excise duty on single super phosphate.

— A two-member high-level delegation led by Justice Abdus Sattar, special assistant to Bangladesh President, arrives in New Delhi.

6 Rajasthan linked with the northern regional power grid.

— First micro-computer system, wholly designed by Indian engineers, inaugurated in New Delhi.

7 In a joint communique issued in Cairo at the end of President Fakhruddin Ali Ahmed's state visit to Egypt, both the countries agree to work to ensure that the Indian Ocean remains a zone of

peace free from foreign military bases, great power rivalry and tension.

— President Fakhruddin Ali Ahmed arrives in Khartoum on an official visit to Sudan.

— The Indo-Bangladesh high-level talks conclude in New Delhi. Both sides reiterate their desire to work for better understanding and for promoting friendly relations.

— In Patna, the international conference against fascism pledges its full support to democratic forces in India and the Prime Minister in their struggle against fascism at home and threats from outside.

8 Three ordinances are promulgated to prohibit publication of objectionable matter with immediate effect, withdraw the immunity conferred by the Parliamentary Proceedings (Protection of Publication) Act of 1956 and repeal the Press Council Act of 1965.

9 The Government drastically reduces the excise duty on steel ingots produced by mini-steel plants from Rs 200 to Rs 50 per tonne.

— Commercial services on television to be started from 1 January 1976.

— India develops technology for culturing pearls.

— An ear bank, first of its kind in Asia, opened in Irwin Hospital, New Delhi.

— Orissa and Madhya Pradesh reach an agreement on sharing waters of the Godavari.

11 In a joint communique issued in Khartoum at the end of President Fakhruddin Ali Ahmed's visit to Sudan both countries call for renewal of efforts by all to achieve the objective of making the Indian Ocean and the Red Sea area a zone of peace free from foreign military bases.

12 In New Delhi, the Prime Minister inaugurates the second world congress on water resources.

14 An ordinance issued to amend the Conservation of Foreign Exchange Act giving the Government power to detain smugglers as long as the Emergency lasts.

16 It is announced that Parliament will meet on 5 January 1976 for a four-week session.

— B. Shiva Rao, veteran journalist and parliamentarian, dies in New Delhi.

17 Government lifts restrictions on the end-use of various categories of iron and steel and scrap following improvement in production and supply.

18 Under a new bilateral trade agreement for 1976 signed in New Delhi, Egypt agrees to supply India five lakh tonnes of crude.

19 The long standing Godavari river water dispute resolved with the signing in New Delhi of an agreement by the Chief Ministers of the five concerned states—Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra and Orissa.

— In New Delhi, the President distributes national film awards.

— A Constitution Bench of the Supreme Court dismisses an application filed by Raj Narain seeking review of the unanimous verdict of the court upholding the election of the Prime Minister to Lok Sabha in 1971.

20 Madhya Pradesh Chief Minister P.C. Sethi appointed Cabinet Minister in charge of new Ministry of Chemicals and Fertilizers. Bansi Lal is allocated Defence Ministry.

— Congress is victorious in Gujarat Panchayat elections, District

Panchayats—Congress wins 383 seats, Congress (O) 192, Jana Sangh 13, BLD and Socialist 2 each, Independents 77. Taluka Panchayats—Congress 2,024, Congress (O) 1,029, Jana Sangh 115, BLD 19, Socialist 17, Independents 735.

22 Vasant Desai, film music director dies in an accident in Bombay.

23 In Bhopal, S. C. Shukla sworn in as Chief Minister of Madhya Pradesh.

24 The all-India report on the first ever agricultural census held in 1970-71 is released.

— In New Delhi, the Life Insurance Corporation launches "Grihalakshmi", a new scheme of life long economic security to non-earning married women.

— Final agreement for the take-over of Burma Shell signed in New Delhi.

25 At Paunar, near Wardha, Acharya Vinoba Bhave breaks his year-long silence and inaugurates the Bhoodan silver jubilee celebrations.

27 In Bihar, 375 coal miners are trapped in Chasnala colliery in Dhanbad district due to bursting of an underground reservoir.

— Assam and Manipur reach an agreement on flood control-cum-power project on Barak river.

29 Uma Shankar Dikshit appointed Governor of Karnataka. Mohanlal Sukhadia to be Governor of Andhra Pradesh.

— The 75th session of the Indian National Congress begins at Komagata Maru Nagar near Chandigarh.

— D.K. Barooah re-elected unopposed as Congress President.

— Sikkim Congress formally merges with Indian National Congress.

31 The Government appoints a one-man commission headed by Ujjal Narain Sinha, retired Chief Justice of the Patna High Court, to inquire into the causes and circumstances of the Chasnala mine disaster.

— The scheme for voluntary disclosure of black money results in a spectacular unearthing of over Rs 1,500 crores.

APPENDICES

1 PERSONNEL OF THE GOVERNMENT[1]

President	Fakhruddin Ali Ahmed
Vice-President	B.D. Jatti

Members of Cabinet	*Portfolios*
1. Smt. Indira Gandhi	Prime Minister, Planning, Atomic Energy, Electronics and Space
2. Y. B. Chavan	External Affairs
3. Jagjivan Ram	Agriculture and Irrigation
4. Kamlapati Tripathi	Railways
5. Bansi Lal	Defence
6. G.S. Dhillon	Shipping and Transport
7. H. R. Gokhale	Law, Justice and Company Affairs
8. Keshav Deo Malaviya	Petroleum
9. T. A. Pai	Industry and Civil Supplies
10. K. Raghu Ramaiah	Works and Housing & Parliamentary Affairs
11. Raj Bahadur	Tourism and Civil Aviation
12. K. Brahmananda Reddy	Home Affairs
13. P.C. Sethi	Chemicals and Fertilizers
14. Shankar Dayal Sharma	Communications
15. Karan Singh	Health and Family Planning
16. C. Subramaniam	Finance

Ministers of State	
17. D. P. Chattopadhyaya[3]	Commerce
18. Ram Niwas Mirdha[4]	Supply and Rehabilitation
19. Pranab Kumar Mukherjee	Revenue and Banking
20. S. Nurul Hassan[2]	Education and Social Welfare and Culture
21. K. C. Pant[2,3]	Energy
22. K. V. Raghunatha Reddy[3]	Labour
23. Vidya Charan Shukla[2]	Information and Broadcasting
24. Chandrajit Yadav[3]	Steel and Mines
25. H.K.L. Bhagat	Works and Housing
26. Chaudhary Ram Sewak	Health and Family Planning
27. Vithal N. Gadgil	Defence Production
28. A. C. George	Industry and Civil Supplies
29. I.K. Gujral	Planning
30. Shah Nawaz Khan	Agriculture and Irrigation
31. B. P. Maurya	Industry and Civil Supplies
32. Om Mehta	Home Affairs, Personnel and Administrative Reforms and Parliamentary Affairs
33. V.A. Seyid Muhammad	Law, Justice and Company Affairs.
34. Mohd. Shafi Qureshi	Railways
35. Anant Prasad Sharma	Industry and Civil Supplies
36. Annasahib P. Shinde	Agriculture and Irrigation
37. Surendra Pal Singh	Tourism and Civil Aviation
38. H.M. Trivedi	Shipping and Transport

Deputy Ministers	
39. Ziaur Rahman Ansari	Petroleum
40. Bedabrata Barua	Law, Justice, and Company Affairs
41. Bipinpal Das	External Affairs
42. A. K. M. Ishaque	Health and Family Planning
43. C. P. Majhi	Chemicals and Fertilizers

[1]Appendix to Chapter 3. As on 3 January 1976.
[2]Incharge of Ministries/Departments.
[3]Also assists the Prime Minister in the Department of Atomic Energy, Electronics and Space.

44. F. H. Mohsin — Home Affairs
45. Arvind Netam — Education, Social Welfare and Culture
46. Jagannath Pahadia — Communications
47. Prabhudas Patel — Agriculture and Irrigation
48. Janaki Ballav Patnaik — Defence
49. B. Shankaranand — Parliamentary Affairs
50. Siddheshwar Prasad — Energy
51. Sukhdev Prasad — Steel and Mines
52. Smt Sushila Rohatgi — Finance
53. Buta Singh — Railways
54. Dalbir Singh — Shipping and Transport
55. Kedar Nath Singh — Agriculture and Irrigation
56. Vishwanath Pratap Singh — Commerce
57. Dharam Bir Sinha — Information and Broadcasting
58. G. Venkat Swamy — Supply and Rehabilitation
59. Balgovind Verma — Labour
60. D. P. Yadav — Education and Social Welfare and Culture

2 MEMBERS OF PARLIAMENT[1]

RAJYA SABHA (COUNCIL OF STATES)[2]

Chairman : B D. Jatti
Deputy Chairman: Godey Murahari

Andhra Pradesh (18)

1. Janardhana Reddi
2. A. S. Chowdhri
3. K. Brahmananda Reddy
4. Bezawada Papireddi
5. V. B. Raju
6. Kota Punnaiah
7. Venigalla Satyanarayana
8. M. Anandam
9. Kasim Ali Abid
10. V. C. Kesava Rao
11. Palavalasa Rajasekharan
12. Ratakonda Narasimha Reddy
13. K. L. N. Prasad
14. Smt Rathnabai Srinivasa Rao
15. Mohammad Rahmatullah
16. K. V. Raghunatha Reddy
17. M. R. Krishna
18. Mohammad Yunus Salim

Assam (7)

19. Nripati Ranjan Choudhury
20. B. C. Bhagwati
21. N. C. Buragohain
22. Sriman Prafulla Goswami
23. Bipinpal Das
24. Abdul Malik
25. D. K. Borooah

Bihar (22)

26. Ramkripal Sinha
27. Smt Aziza Imam
28. D. P. Singh
29. Kamalnath Jha
30. Chandramanilal Choudhary
31. Gunanand Thakur
32. Shyamlal Gupta
33. Vacant
34. Kameshwar Singh
35. Yogendra Sharma
36. Ramanand Yadav
37. Dharam Chand Jain
38. Indradeep Sinha
39. B.R. Munda
40. Smt Jahanara Jaipal Singh
41. Bhola Prasad
42. Bhola Paswan Shastri
43. Sitaram Kesri
44. Rajendra Kumar Poddar
45. Bhisma Narain Singh
46. Mahendra Mohan Misra
47. Smt Pratibha Singh

Gujarat (11)

48. Yogendra Makwana
49. Smt Sumitra G. Kulkarni
50. Lal K. Advani
51. Smt Kumudben Manishanker Joshi
52. Himmat Sinh
53. Hari Singh Bhagubava Mahida
54. Ibrahim Kalania
55. Ramlal D. Parikh
56. H. M. Trivedi
57. Viren J. Shah
58. Golandaz Mohammedhusain A. Samad

Haryana (5)

59. Bansi lal
60. Ranbir Singh
61. Parbhu Singh
62. Krishan Kant
63. Sultan Singh

Himachal Pradesh (3)

64. Roshan Lal
65. Jagan Nath Bhardwaj
66. Gian Chand Totu

[1]Appendix to Chapter 3. [2]As on 3 April 1976.

Jammu and Kashmir (4)

67. Om Mehta
68. Syed Mir Qasim
69. Syed Nizam-ud-din
70. Tirath Ram Amla

Karnataka (12)

71. Veerendra Patil
72. Malappa Lingappa Kollur
73. R.M. Desai
74. Mulka Govinda Reddy
75. Smt Margaret Alva
76. T. A. Pai
77. B. Rachaiah
78. U. K. Lakshmana Gowda
79. Maqsood Ali Khan
80. K. S. Malle Gowda
81. F.M. Khan
82. H. S. Narasiah

Kerala (9)

83. Hamid Ali Schamnad
84. P. K. Kunjachen
85. Smt Leela Damodara Menon
86. Viswanatha Menon
87. B. V. Abdulla Koya
88. V. A. Seyid Muhammad
89. Pattiam Rajan
90. K.K. Madhavan
91. S. Kumaran

Madhya Pradesh (16)

92. Prakash Chand Sethi
93. Jagdish Joshi
94. Smt. Ratan Kumari
95. Smt Vidyawati Chaturvedi
96. Narayan Prasad Chaudhari
97. M. B. Singh
98. Balram Das
99. Srikant Verma
100. Smt Maimoona Sultan
101. Bhairon Singh Shekhawat
102. Smt Shyamkumari Devi
103. Chakrapani Shukla
104. Sawaisingh Sisodia
105. Shankarlal Tiwari
106. Nand Kishore Bhatt
107. Gurudev Gupta

Maharashtra (19)

108. A.R. Antulay
109. S. Wasudeorao Dhabe
110. Deorao Shivram Patil
111. Bapuraoji Marotraoji Deshmukh
112. Narendra Marutrao Kamble
113. R. D. Jagtap Avergoankar
114. Sikandar Ali Wajd
115. Vithal Gadgil
116. N. H. Kumbhare
117. Kum. Saroj Purshottam Khaparde
118. Krishnarao Narayanarao Dhulap
119. Smt Sushila Shankar Adiverekar
120. Gulabrao Patil
121. Govindrao Ramachanda Mhaisekar
122. Jayant Shridhar Tilak
123. Sadashiv Krishnarao Vaishampayan
124. D. Y. Pawar
125. V. R. Parashar
126. M. R. Vyas

Manipur (1)

127. Irengbam Tompok Singh

Meghalaya (1)

128. Showaless K. Shilla

Nagaland (1)

129. Khyomo Lotha

Orissa (10)

130. Brahmananda Panda
131. Narasingha Prasad Nanda
132. C.P. Majhi
133. Santosh Kumar Sahu
134. Nilamoni Routaray
135. Rabi Ray
136. Lakshmana Mahapatro
137. Lokanath Misra
138. B. C. Mahanti
139. Smt Saraswati Pradhan

Punjab (7)

140. Mohan Singh
141. Jagjit Singh Anand
142. Smt Amarjit Kaur
143. Raghbir Singh Gill
144. Niranjan Singh Talib
145. Satpaul Mittal
146. Smt Ambika Soni

Rajasthan (10)

147. Nathi Singh
148. Smt Lakshmi Kumari Chundawat
149. Dinesh Chandra
150. Jamna Lal Berwa
151. Smt Ushi Khan
152. Mohammed Jsman Arif
153. Ram Niwas Mirdha
154. Rishi Kumar Mishra
155. Kishan Lal Sharma
156. Ganesh Lal Mali

Sikkim (1)

157. Solomon Tshering

Tamil Nadu (18)

158. A.K. Refaye
159. Vacant
160. K.A. Krishnaswamy
161. Vacant
162. M. Kader Shah
163. M. Kamalanathan
164. C. D. Natarajan
165. Vacant
166. S. Ranganathan
167. M. C. Balan
168. Vacant

169. Vacant
170. M. S. Abdul Khader
171. V. V. Swaminathan
172. Vacant
173. G. Lakshmanan
174. John *alias* Valampuri John
175. S. A. Khaja Mohideen

Tripura (1)

176. Birchandra Deb Barman

Uttar Pradesh (34)

177. Banarsi Das
178. Smt Hamida Habibullah
179. Kalp Nath
180. Sukhdev Prasad
181. Jagbir Singh
182. Devendra Nath Dwividi
183. Piare Lall Kureel *urf* Talib
184. Yashpal Kapur
185. Krishna Nand Joshi
186. Ghayoor Ali Khan
187. Harsh Deo Malviya
188. S. Nurul Hasan
189. Triloki Singh
190. Prakash Veer Shastri
191. Anand Narain Mulla
192. Mahadeo Prasad Varma
193. Mohan Singh Oberoi
194. Nageshwar Prasad Shahi
195. Bhagwan Din
196. Prakash Mehrotra
197. Suresh Narain Mulla
198. Chandra Shekhar
199. Ranjnarain
200. Shiv Dayal Singh Chaurasia
201. V. B. Singh
202. Z. A. Ahmad
203. Godey Murahari
204. Om Prakash Tyagi
205. Subramanian Swamy
206. Shyam Lal Yadav
207. Bhanu Pratap Singh
208. Sundar Singh Bhandari
209. Kamalapati Tripathi
210. Syed Ahmad Hashmi

West Bengal (16)

211. Prasenjit Barman
212. Smt Pratima Bose
213. Sardar Amjad Ali
214. Rajpat Kumar Chakrabarti
215. Krishna Bahadur Chettri
216. Phanindra Nath Hansda
217. Bhupesh Gupta
218. Kalyan Roy
219. Debiprasad Chattopadhyaya
220. Kali Mukherjee
221. Smt Purabi Mukhopadhyay
222. Sankar Kumar Ghosh
223. Jaharlal Banerjee
224. Sanat Kumar Raha
225. Pranab Mukherjee
226. Ahmad Hossain Mondal

Arunachal Pradesh (1)

227. Todak Basar[1]

Delhi (3)

228. Khursheed Alam Khan
229. Smt Savita Behen
230. Charanjit Chanana

Mizoram (1)

231. Lalbuaia

Pondicherry (1)

232. S. Sivaprakasam

Nominated by the President (12)

233. Rasheeduddin Khan
234. C. K. Daphtary
235. Bishambhar Nath Pande
236. B.N. Bannerjee
237. Pramatha Nath Bisi
238. Lokesh Chandra
239. Smt Maragatham Chandrasekhar
240. Krishna Kripalani
241. Habib Tanvir
242. Abu Abraham
243. Scato Swu
234. V. P. Dutt

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[1]Nominated by the President.

Note: As the Tamil Nadu Assembly stands dissolved no elections to the Rajya Sabha were held in that Constituency.

LOK SABHA (HOUSE OF THE PEOPLE)
(as on 1-6-1975)

Speaker : G. S. Dhillon
Deputy Speaker : G. G. Swell

Sl. No.	Constituency	Name of the Member	Party[1]
1	2	3	4
	Andhra Pradesh (41)		
1.	Adilabad	Poddutoori Ganga Reddy	Cong.
2.	Amalapuram (R)	B. S. Murthy	Cong.
3.	Anakapalli	S. R. A. S. Appalanaidu	Cong.
4.	Anantapur	Ponnapati Antony Reddi	Cong.
5.	Bhadrachalam (R)	Smt B. Radhabai Ananda Rao	Cong.
6.	Bobbili	K. Narayana Rao	Cong.
7.	Chittoor	P. Narasimha Reddy	Cong.
8.	Cuddapah	Y. Eswara Reddy	CPI
9.	Eluru	Kommareddi Suryanarayana	Cong.
10.	Gudivada	Maganti Ankineedu	Cong.
11.	Guntur	K. Raghu Ramaiah	Cong.
12.	Hindupur	P. Bayapa Reddy	Cong.
13.	Hyderabad	G. S. Melkote	Cong.
14.	Kakinada	M. S. Sanjeevi Rao	Cong.
15.	Karimnagar	M. Satyanarayan Rao	TPS
16.	Kavali	P. Venkata Reddy	Cong.
17.	Khammam	Smt. T. Lakshmi Kantamma	Cong.
18.	Kurnool	K. Kodanda Rami Reddy	Cong.
19.	Machilipatnam	Meduri Nageswararao	Cong.
20.	Mahbubnagar	J. Rameshwar Rao	Cong.
21.	Medak	Mallikarjun	Cong.
22.	Nagarkurnool (R)	M. Bheeshmadev	Cong.
23.	Nalgonda	K. Ramkrishna Reddy	Cong.
24.	Nandyal	P. Venkatasubbaiah	Cong.
25.	Narasapur	M. T. Raju	Cong.
26.	Narasaraopet	Maddi Sudarsanam	Cong.
27.	Nellore (R)	D. Kamakshaiah	Cong.
28.	Niryalguda	B.N. Reddy	CPI (M)
29.	Nizamabad	Muduganti Ram Gopal Reddy	Cong.
30.	Ongole	P. Ankineedu Prasadarao	Cong.
31.	Parvathipuram (R)	Biddika Satyanarayana	Cong.
32.	Peddapalli (R)	V. Tulasiram	Cong.
33.	Rajahmundry	S. B. P. Pattabhi Ramarao	Cong.
34.	Rajampet	P. Parthasarathy	Cong.
35.	Secunderabad	M. M. Hashim	Cong.
36.	Siddipet (R)	G. Venkatswamy	Cong.
37.	Srikakulam	Rajagopalarao Boddepalli	Cong.
38.	Tirupathi (R)	T. Balakrishniah	Cong.
39.	Vijayawada	K. L. Rao	Cong.
40.	Visakhapatnam	P. V. G. Raju	Cong.
41.	Warangal	S. B. Giri	TPS
	Assam (14)		
42.	Barpeta	Ismail Hossain Khan	Cong.
43.	Cachar	Noorul Huda	CPI (M)
44.	Dhubri	Moinul Haque Choudhury	Cong.
45.	Dibrugarh	Robindra Nath kakoti	Cong.

[1]The abbreviations used are: Congress Party (Cong.); Communist Party of India (Marxist) CPI (M); Communist Party of India (CPI); Dravida Munnetra Kazhagam (DMK); Anna Dravida Munnetra Kazhagam (ADMK); Jana Sangh (JS); Congress (Opposition) Party (Cong. O); Telengana Praja Samiti (TPS); Socialist Party (SP); Muslim League (ML); Kerala Congress (KC); United Independent Parliamentary Group (UIPG); Forward Bloc (FB);Bharitiya Lok Dal (BLD); and Unattached (UA);.
(R) indicates reserved seats.

1	2	3	4
46.	Diphu (R)	Biren Engti	Cong.
47.	Gauhati	Dinesh Chandra Goswami	Cong.
48.	Jorhat	Tarun Gogoi	Cong.
49.	Kaliabor	Bedabrata Barua	Cong.
50.	Karimganj (R)	Nihar Ranjan Laskar	Cong.
51.	Kokrajhar (R)	D. Basumatari	Cong.
52.	Lakhimpur	Biswanarayan Shastri	Cong.
53.	Mangaldai	Dharanidhar Das	Cong.
54.	Nowgong	Liladhar Koktoki	Cong.
55.	Tezpur	Kamala Prasad	Cong.
	Bihar (53)		
56.	Araria (R)	Tulmohan Ram	Cong.
57.	Aurangabad	Satyendra Narayan Sinha	Cong. (O)
58.	Bagaha (R)	Bhola Raut	Cong.
59.	Banka	Madhu Limaye	SP
60.	Barh	Dharam Bir Sinha	Cong.
61.	Begusarai	Shyamnandan Mishra	Cong. (O)
62.	Bettiah	Vacant	
63.	Bhagalpur	Bhagwat Jha Azad	Cong.
64.	Bikramganj	Sheo Pujan Shastri	Cong.
65.	Buxar	Anant Prasad Sharma	Cong.
66.	Chapra	Ramshekhar Prasad Singh	Cong.
67.	Chatra	Shankar Dayal Singh	Cong.
68.	Darbhanga	Vacant	
69.	Chanbad	Ram Narain Sharma	Cong.
70.	Dumka (R)	S. C. Besra	Cong.
71.	Gaya (R)	Ishwar Chaudhry	JS
72.	Giridih	Chapalendu Bhattacharyya	Cong.
73.	Godda	Jagdish Narain Mandal	Cong.
74.	Gopalganj	D. N. Tiwary	Cong.
75.	Hajipur	Digvijaya Narain Singh	Cong. (O)
76.	Hazaribagh	Damodar Pandey	Cong.
77.	Jainagar	Bhogendra Jha	CPI
78.	Jamshedpur	Swaran Singh Sokhi	Cong.
79.	Jamui (R)	Bhola Manjhi	CPI
80.	Jehanabad	Chandra Shekar Singh	CPI
81.	Katihar	Gyaneshwar Prasad Yadav	JS
82.	Kesaria	K. M. Madhukar	CPI
83.	Khagaria	Shivashankar Prasad Yadav	BLD
84.	Khunti (R)	Niral Enem Horo	UIPG
85.	Kishanganj	Md. Jamilurahman	Cong.
86.	Lohardaga (R)	Kartik Oraon	Cong.
87.	Madhipura	R. P. Yadav	Cong.
88.	Madhubani	Jagannath Mishra	Cong.
89.	Maharajganj	Ram Deo Singh	SP
90.	Monghyr	Devnandan Prasad Yadav	Cong.
91.	Motihari	Bibhuti Mishra	Cong.
92.	Muzaffarpur	Nawal Kishore Sinha	Cong.
93.	Nalanda	Siddheshwar Prasad	Cong.
94.	Nawada	Sukhdeo Prasad Verma	Cong.
95.	Palamau (R)	Kumari Kamla Kumari	Cong.
96.	Patna	Ramavatar Shastri	CPI
97.	Pupri	Hari Kishore Singh	Cong.
98.	Purnea	Mohammad Tahir	Cong.
99.	Rajmahal (R)	Yogesh Chandra Murmu	Cong.
100.	Ranchi	P. K. Ghosh	Cong.
101.	Rosera (R)	Ram Bhagat Paswan	Cong.
102.	Saharsa	Chiranjib Jha	Cong.
103.	Samastipur	Yamuna Prasad Mandal	Cong.
104.	Sasaram (R)	Jagjivan Ram	Cong.
105.	Shahabad	Bali Ram Bhagat	Cong.
106.	Singhbhum (R)	Moran Singh Purty	UIPG
107.	Sitamarhi	Nagendra Prasad Yadav	Cong.
108.	Siwan	Mohammad Yusuf	Cong.

1	2	3	4
	Gujarat (24)		
109.	Ahmedabad	P. G. Mavalankar	UA
110.	Amreli	Jivraj N. Mehta	Cong.
111.	Anand	Pravinsinh Natvarsinh Solanki	Cong (O)
112.	Banaskantha	Popatlal Mulshankerbhai Joshi	Cong.
113.	Baroda	Fatesinghrao Gaekwad	Cong.
114.	Bhavnagar	Prasannbhai Mehta	Cong. (O)
115.	Broach	Vacant	
116.	Bulsar (R)	Nanubhai N. Patel	Cong. (O)
117.	Dabhoi	Prabhudas Patel	Cong.
118.	Dhandhuka	H. M. Patel	BLD
119.	Dohad (R)	Bhaljibhai Ravjibhai Parmar	Cong. (O)
120.	Gandhinagar (R)	Somchand Solanki	Cong. (O)
121.	Godhra	Piloo Mody	BLD
122.	Jamnagar	Daulatsinhji Pratapsinhji Jadeja	Cong.
123.	Junagadh	Nanjibhai Ravjibhai Vekaria	Cong.
124.	Kaira	D. D. Desai	Cong.
125.	Kutch	Mahipatray M. Mehta	Cong.
126.	Mandvi (R)	Amarsinh Chaudhary	Cong.
127.	Mehsana	Natvarlal Amrutlal Patel	Cong.
128.	Patan (R)	Khemchandbhai Somabhai Chavda	Cong. (O)
129.	Rajkot	Arvind Kumar Mohanlal Patel	Cong.
130.	Sabarkantha	Kum. Maniben Vallabhbhai Patel	Cong. (O)
131.	Surat	Morarji Desai	Cong. (O)
132.	Surendranagar	Rasiklal Parikh	Cong.
	Haryana (9)		
133.	Ambala (R)	Ch. Ram Prakash	Cong.
134.	Gurgaon	Tayyab Hussain	Cong.
135.	Hissar	Mani Ram Godara	Cong.
136.	Jhajjar	Sher Singh	Cong.
137.	Kaithal	Gulzarilal Nanda	Cong.
138.	Karnal	Madho Ram Sharma	Cong.
139.	Mahendragarh	Rao Birender Singh	UA
140.	Rohtak	Mukhtiar Singh Malik	JS
141.	Sirsa (R)	Dalbir Singh	Cong.
	Himachal Pradesh (4)		
142.	Hamirpur	Narain Chand Parashar	Cong.
143.	Kangra	Vikram Mahajan	Cong.
144.	Mandi	Virbhadra Singh	Cong.
145.	Simla (R)	Vacant	
	Jammu and Kashmir (6)		
146.	Anantnag	Mohamed Shafi Qureshi	Cong.
147.	Baramulla	Syed Ahmed Aga	Cong.
148.	Jammu	Inder J. Malhotra	Cong.
149.	Ladakh	Kushok Bakula	Cong.
150.	Srinagar	S. A. Shamim	UA
151.	Udhampur	Karan Singh	Cong.
	Karnataka (27)		
152.	Bagalkot	S. B. Patil	Cong.
153.	Bangalore	K. Hanumanthaiya	Cong.
154.	Belgaum	A. K. Kotrashetti	Cong.
155.	Bellary	V. K. R. Varadaraja Rao	Cong.
156.	Bidar (R)	Shankar Deo	Cong.
157.	Bijapur	Bhimappa Ellappa Choudhari	Cong.
158.	Chamarajanagar (R)	S. M. Siddayya	Cong.
159.	Chikmagalur	D. B. Chandre Gowda	Cong.
160.	Chikodi (R)	B. Shankaranand	Cong.
161.	Chitradurga	Kondajji Basappa	Cong.

1	2	3	4
162.	Dharwar North	Smt Sarojini Mahishi	Cong.
163.	Dharwar South	F. H. Mohsin	Cong.
164.	Gulbarga	Sidram Reddy	Cong.
165.	Hassan	Nuggehalli Shivappa	Cong.
166.	Hoskote	M. V. Krishnappa	Cong.
167.	Kanakapura	C. K. Jaffer Sharief	Cong.
168.	Kanara	Balakrishna Venkanna Naik	Cong.
169.	Kolar (R)	G. Y. Krishnan	Cong.
170.	Koppal	Siddarameshwar Swami	Cong.
171.	Mandya	K. Chikkalingaiah	Cong.
172.	Madhugiri	K. Mallanna	Cong.
173.	Mangalore	K. K. Shetty	Cong.
174.	Mysore	Tulsidas Dasappa	Cong.
175.	Raichur	Pampan Gowda	Cong.
176.	Shimoga	T. V. Chandrashekharappa Veerabasappa	Cong.
177.	Tumkur	K. Lakkappa	Cong.
178.	Udipi	P. Ranganath Shenoy	Cong.
	Kerala (19)		
179.	Adoor (R)	Smt Bhargavi Thankappan	CPI
180.	Ambalapuzha	K. Balakrishnan	UA
181.	Badagara	K. P. Unnikrishnan	Cong.
182.	Chirayinkil	Vayalar Ravi	Cong.
183.	Ernakulam	Henry Austin	Cong.
184.	Kasargod	Ramachandran Kadannappalli	Cong.
185.	Kottayam	Varkey George	KC
186.	Kozhikode	Ebrahim Sulaiman Sait	ML
187.	Manjeri	C. H. Mohammed Koya	ML
188.	Mavelikara	R. Balakrishna Pillai	KC
189.	Mukundapuram	A. C. George	Cong.
190.	Muvattupuzha	C. M. Stephen	Cong.
191.	Palghat	A. K. Gopalan	CPI (M)
192.	Peermade	M. M. Joseph	KC
193.	Ponnani (R)	M. K. Krishnan	CPI (M)
194.	Quilon	N. Sreekantan Nair	UA
195.	Tellicherry	C. K. Chandrappan	CPI
196.	Trichur	C. Janardhanan	CPI
197.	Trivandrum	Vacant	
	Madhya Pradesh (37)		
198.	Balaghat	C. D. Gautam	Cong.
199.	Bastar (R)	Lambodar Baliar	Cong.
200.	Betul	N. K. P. Salve	Cong.
201.	Bhind	Smt V. R. Scindia	JS
202.	Bhopal	Shankar Dayal Sharma	Cong.
203.	Bilaspur	R. G. Tiwari	Cong.
204.	Chhindwara	Gargi Shankar Mishra	Cong.
205.	Damoh	V. Shanker Giri	Cong.
206.	Dhar (R)	Bharat Singh Chowhan	JS
207.	Durg	Chandulal Chandrakar	Cong.
208.	Guna	Madhavrao Scindia	JS
209.	Gwalior	Atal Bihari Vajpayee	JS
210.	Hoshangabad	Chaudhary Nitiraj Singh	Cong.
211.	Indore	Ramsingh Bhai	Cong.
212.	Jabalpur	Sharad Yadav	SP
213.	Janjgir (R)	Bhagatram Rajaram Manhar	Cong.
214.	Jhabua (R)	Bhagirath Ramaji Bhanwar	BLD
215.	Kanker (R)	Arvind Netam	Cong.
216.	Khandwa	Gangacharan Dixit	Cong.
217.	Khargone	R. V. Bade	JS
218.	Mahasamund	Shrikrishna Agrawal	Cong.
219.	Mandla (R)	M. G. Uikey	Cong.
220.	Mandsaur	L. N. Pandeya	JS
221.	Morena (R)	Hukam Chand Kachhwai	JS

1	2	3	4
222.	Raigarh (R)	Umed Singh Rathia	Cong.
223.	Raipur	Vidya Charan Shukla	Cong.
224.	Rajanadgaon	Ramsahai Pandey	Cong.
225.	Rewa	Martand Singh	UIPG
226.	Sagar (R)	Smt Sahodrabai Rai	Cong.
227.	Satna	Narendra Singh	JS
228.	Shahdol (R)	Dhan Shah Pradhan	UIPG
229.	Shahjapur	Jagannathrao Joshi	JS
230.	Sidhi	Rana Bahadur Singh	UIPG
231.	Surguja (R)	Babunath Singh	Cong.
232.	Tikamgarh (R)	Nathu Ram Ahirwar	Cong.
233.	Ujjain (R)	Phool Chand Verma	JS
234.	Vidisha	R. N. Goenka	UIPG
	Maharashtra (45)		
235.	Ahmednagar	Annasahib P. Shinde	Cong.
236.	Akola	Vasant Sathe	Cong.
237.	Amravati	K. G. Deshmukh	Cong.
238.	Aurangabad	Manikrao Palodakar	Cong.
239.	Baramati	R. K. Khadilkar	Cong.
240.	Bhandara	Jwala Prasadji Dube	Cong.
241.	Bhir	S. T. Pandit	Cong.
242.	Bhiwandi	Bhaoo Sahib Dhamankar	Cong.
243.	Bombay Central	Smt Roza Vidyadhar Deshpande	CPI
244.	Bombay Central-South	Salebhoy Abdul Kader	Cong.
245.	Bombay North-East	Raja Kulkarni	Cong.
246.	Bombay North-West	H. R. Gokhale	Cong.
247.	Bombay South	N. N. Kailas	Cong.
248.	Buldana	Yadav Shivram Mahajan	Cong.
249.	Chanda	Abdul Shafee	Cong.
250.	Chimur	Krishnarao Thakur	Cong.
251.	Dahanu (R)	Laxman Kakadya Dumada	Cong.
252.	Dhulia	C. A. Patil	Cong.
253.	Hatkangale	Dattajirao Baburao Kadam	Cong.
254.	Jalgaon	Krishnarao Madhavrao Patil	Cong.
255.	Jalna	Baburao Jangluji Kale	Cong.
256.	Karad	Smt Premalabai Dajisaheb Chavan	Cong.
257.	Khemgaon (R)	Arjun Shripat Kasture	Cong.
258.	Khed	Anantrao Patil	Cong.
259.	Kolaba	Shankarrao Savant	Cong.
260.	Kolhapur	Rajaram D. Nimbalkar	Cong.
261.	Kopergaon	Eknath Vithalrao Vikhe Patil	Cong.
262.	Latur (R)	Tulsiram Dashrath Kamble	Cong.
263.	Malegaon (R)	Z. M. Kahandole	Cong.
264.	Nagpur	Jambuvant Dhote	FB
265,	Nanded	Venkatarao B. Tarodekar	Cong.
266.	Nandurbar (R)	T. H. Gavit	Cong.
267.	Nasik	B. R. Kavade	Cong.
268.	Osmanabad	T. A. Patil	Cong.
269.	Pandharpur (R)	Nivruti Satwaji Kamble	UA
270.	Parbhani	Shivajirao S. Deshmukh	Cong.
271.	Poona	Mohan Dharia	Cong.
272.	Rajapur	Madhu Dandavate	SP
273.	Ramtek	Ram Hedaoo	UA
274.	Ratnagiri	S. L. Peje	Cong.
275.	Sangli	Anna Saheb Gotkhinde	Cong.
276.	Satara	Y. B. Chavan	Cong.
277.	Sholapur	S. R. Damani	Cong.
278.	Wardha	J. G. Kadam	Cong.
279.	Yeotmal	S. B. Thakre	Cong.
	Manipur (2)		
280.	Inner Manipur	N. Tombi Singh	Cong.
281.	Outer Manipur (R)	Paokai Haokip	Cong.

1	2	3	4
	Meghalaya (2)		
282.	Shillong (R)	G. G. Swell	UA
283.	Tura (R)	Karnesh Marak	UA
	Nagaland (1)		
284.	Nagaland	A. Kevichusa	UIPG
	Orissa (20)		
285.	Angul	Badakumar Pratap Gangadeb	Cong.
286.	Balasore	Shyam Sunder Mahapatra	Cong.
287.	Bhadrak (R)	Arjun Sethi	Cong.
288.	Bhanjanagar	Duti Krushna Panda	CPI
289.	Bhubaneswar	Chintamani Panigrahi	Cong.
290.	Bolangir	R. R. Singh Deo	BLD
291.	Chatrapur	Jagannath Rao	Cong.
292.	Cuttack	Janaki Ballav Patnaik	Cong.
293.	Dhenkanal	Devendra Satpathy	Cong.
294.	Jajpur (R)	Anadi Charan Das	Cong.
295.	Kalahandi	Pratap Keshari Deo	BLD
296.	Kendrapara	Surendra Mohanty	BLD
297.	Keonjhar (R)	Kumar Majhi	Cong.
298.	Koraput (R)	Giridhar Gomango	Cong.
299.	Mayurbhanj (R)	Chandramohan Sinha	BLD
300.	Nowrangpur (R)	K. Pradhani	Cong.
301.	Phulbani (R)	Baksi Nayak	BLD
302.	Puri	Banamali Patnaik	Cong.
303.	Sambalpur	Banamali Babu	Cong.
304.	Sundargarh (R)	Gajadhar Majhi	Cong.
	Punjab (13)		
305.	Amritsar	Raghunandan Lal Bhatia	Cong.
306.	Bhatinda (R)	B. S. Bhaura	CPI
307.	Fazilka	Gurdas Singh Badal	UA
308.	Ferozepore	Mohinder Singh Gill	Cong.
309.	Gurdaspur	Prabodh Chandra	Cong.
310.	Hoshiarpur	Darbara Singh	Cong.
311.	Jullundur	Swaran Singh	Cong.
312.	Ludhiana	Devinder Singh Garcha	Cong.
313.	Patiala	Sat Pal Kapur	Cong.
314.	Phillaur (R)	Vacant	
315.	Rupar (R)	Buta Singh	Cong.
316.	Sangrur	Vacant	
317.	Tarn Taran	Gurdial Singh Dhillon[1]	
	Rajasthan (23)		
318.	Ajmer	Bashweshwar Nath Bhargava	Cong.
319.	Alwar	Hari Prasad Sharma	Cong.
320.	Banswara (R)	Hiralal Doda	Cong.
321.	Barmer	Amrit Nahata	Cong.
322.	Bharatpur	Raj Bahadur	Cong.
323.	Bhilwara	Hemendra Singh Banera	JS
324.	Bikaner	Karni Singh	UIPG
325.	Chittorgarh	Bishwanath Jhunjhunwala	UA
326.	Dausa	Nawal Kishore Sharma	Cong.
327.	Ganganagar (R)	Panna Lal Barupal	Cong.
328.	Hindaun (R)	Jagannath Pahadia	Cong.
329.	Jaipur	Smt Gayatri Devi	UA
330.	Jalore	N. K. Sanghi	Cong.
331.	Jhalawar	Brijraj Singh	Cong.

[1]Dr G.S. Dhillon was elected on the Congress ticket but ceased to have any party affiliation after his election as Speaker of the Lok Sabha.

1	2	3	4
332.	Jhunjhunu	S. N. Singh	Cong.
333.	Jodhpur	Smt Krishna Kumari	UIPG
334.	Kota (R)	Onkar Lal Berwa	JS
335.	Nagaur	Nathuram Mirdha	Cong.
336.	Pali	Mool Chand Daga	Cong.
337.	Sawai Madhopur (R)	Chhuttan Lal	Cong.
338.	Sikar	Shrikrishan Modi	Cong.
339.	Tonk (R)	Ram Kanwar	BLD
340.	Udaipur (R)	Lalji Bhai	JS
	Sikkim (1)		
341.	Sikkim	S.K. Rai	Cong.
	Tamil Nadu (39)		
342.	Chidambaram (R)	V. Mayavan	DMK
343.	Chingleput	C. Chittibabu	DMK
344.	Coimbatore	Smt Parvati Krishnan	CPI
345.	Cuddalore	S. Radhakrishnan	Cong.
346.	Dharmapuram (R)	C. T. Dhandapani	DMK
347.	Dindigul	K. Mayathevar	ADMK
348.	Gobichettipalayam	P.A. Saminathan	DMK
349.	Kallakurichi	M. Deiveekan	DMK
350.	Karur	K. Gopal	Cong.
351.	Krishnagiri	C. Subramaniam	Cong.
352.	Kumbakonam	Era Sezhiyan	DMK
353.	Madras North	Krishnan Manoharan	ADMK
354.	Madras South	Murasoli Maran	DMK
355.	Madurai	R. V. Swaminathan	Cong.
356.	Mayuram (R)	K. Subravelu	DMK
357.	Mettur	Iruppu Govindaswamy Bhuvarahan	Cong.
358.	Nagapattinam	M. Kathamuthu	CPI
359.	Nagercoil	K. Kamaraj	Cong. (O)
360.	Nilgiris	J. M. Gowder	DMK
361.	Perambalur (R)	A. Durairasu	DMK
362.	Periakulam	Muhammed Sheriff	ML
363.	Pollachi	Mohan Raj	DMK
364.	Pudukkottai	K. Veeriah	DMK
365.	Ramanathapuram	P. K. M. Thevar	FB
366.	Salem	E. R. Krishnan	DMK
367.	Sivaganja	T. Kiruttinan	DMK
368.	Sivakasi	Smt Venkatasami Jeyalakshmi	Cong.
369.	Sriperumbudur (R)	T. S. Lakshmanan	DMK
370.	Tenkasi (R)	A. M. Chellachami	Cong.
371.	Thanjavur	S. D. Somasundaram	ADMK
372.	Tindivanam	M. R. Lakshminarayanan	Cong.
373.	Tiruchendur	M. S. Sivasamy	DMK
374.	Tiruchengoda	M. Muthuswamy	ADMK
375.	Tiruchirappalli	M. Kalyanasundaram	CPI
376.	Tirunelveli	S. A. Muruganantham	CPI
377.	Tiruppattur	C. K. Chinnaraji	DMK
378.	Tiruttani	O. V. Alagesan	Cong.
379.	Vellore (R)	R. P. Ulaganambi	DMK
380.	Wandiwash	G. Viswanathan	ADMK
	Tripura (2)		
381.	Tripura East (R)	D. Deb	CPI (M)
382.	Tripura West	Biren Dutta	CPI (M)
	Uttar Pradesh (85)		
383.	Agra	Achal Singh	Cong.
384.	Akbarpur (R)	Ramji Ram	Cong.
385.	Aligarh	Shiv Kumar Shastri	BLD
386.	Allahabad	Janeshwar Misra	BLD

1	2	3	4
387.	Almora	Narendra Singh Bisht	Cong.
388.	Amethi	Vidya Dhar Bajpai	Cong.
389.	Amroha	Ishaq Sambhali	CPI
390.	Aonla	Smt Savitri Shyam	Cong.
391.	Azamgarh	Chandraject Yadav	Cong.
392.	Baghpat	Ram Chandra Vikal	Cong.
393.	Bahraich	Badlu Ram Shukla	Cong.
394.	Ballia	Chandrika Prasad	Cong.
395.	Balrampur	Chandra Bhal Mani Tewari	Cong.
396.	Banda	R. R. Sharma	JS
397.	Bansgaon (R)	Ram Surat Prasad	Cong.
398.	Bara Banki	Rudra Pratap Singh	Cong.
399.	Bareilly	Satish Chandra	Cong.
400.	Basti (R)	A. P. Dhusia	Cong.
401.	Bijnor (R)	Ram Dayal	Cong.
402.	Bilhaur	Smt Sushila Rohatgi	Cong.
403.	Budaun	Karan Singh Yadav	Cong.
404.	Bulandshahr	Surendra Pal Singh	Cong.
405.	Chail (R)	Chhotey Lal	Cong.
406.	Chandauli	Sudhakar Pandey	Cong.
407.	Dehra Dun	Mulki Raj Saini	Cong.
408.	Deoria	Bishwanath Roy	Cong.
409.	Domariaganj	K. D. Malaviya	Cong.
410.	Etah	Rohanlal Chaturvedi	Cong.
411.	Etawah	Shanker Tewari	Cong.
412.	Faizabad	R. K. Sinha	Cong.
413.	Farrukhabad	Awdhesh Chandra Singh	Cong.
414.	Fatehpur	Sant Bux Singh	Cong.
415.	Firozabad (R)	Chhatrapati Ambesh	Cong.
416.	Garhwal	Pratap Singh Negi	Cong.
417.	Ghatampur (R)	Tula Ram	Cong
418.	Ghazipur	Sarjoo Pandey	CPI
419.	Ghosi	Jharkhandey Rai	CPI
420.	Gonda	Anand Singh	Cong.
421.	Gorakhpur	Narsingh Narain Pandey	Cong.
422.	Hamirpur	Swami Brahmanand	Cong.
423.	Hapur	Buddha Priya Maurya	Cong.
424.	Hardoi (R)	Kinder Lal	Cong.
425.	Hathras (R)	Chandra Shailani	Cong.
426.	Jalaun (R)	Chowdhary Ram Sewak	Cong.
427.	Jaunpur	Rajdeo Singh	Cong.
428.	Jhansi	Govind Dass Richhariya	Cong.
429.	Kairana	Shafquat Jung	Cong.
430.	Kaisarganj	Smt Shakuntala Nayar	JS
431.	Kannauj	S. N. Misra	Cong.
432.	Kanpur	S. M. Banerjee	CPI
433.	Kasganj	Mahadeepak Singh Shakya	JS
434.	Khalilabad	Krishna Chandra Pandey	Cong.
435.	Kheri	Balgovind Verma	Cong.
436.	Khurja (R)	Hari Singh	Cong.
437.	Lalganj (R)	Ram Dhan	Cong.
438.	Lucknow	Smt Sheila Kaul	Cong.
439.	Machhlishahr	Nageshwar Dwivedi	Cong.
440.	Maharajganj	Shibban Lal Saksena	UA
441.	Mainpuri	Maharaj Singh	Cong.
442.	Mathura	Chakleshwar Singh	Cong.
443.	Meerut	Shahnawaz Khan	Cong.
444.	Mirzapur	Aziz Imam	Cong.
445.	Misrikh (R)	Sankta Prasad	Cong.
446.	Mohanlalganj (R)	Smt Ganga Devi	Cong.
447.	Moradabad	Virendra Agarwala	JS
448.	Muzaffarnagar	Vijay Pal Singh	CPI
449.	Nainital	Krishna Chandra Pant	Cong.
450.	Padrauna	Genda Singh	Cong.
451.	Phulpur	V. N. P. Singh	Cong.
452.	Pilibhit	Mohan Swarup	Cong.
453.	Pratapgarh	Dinesh Singh	Cong.

1	2	3	4
454.	Rae Bareli	Smt Indira Nehru Gandhi	Cong.
455.	Rampur	Zulfiquar Ali Khan	Cong.
456.	Ramsanehighat (R)	Baij Nath Kureel	Cong.
457.	Robertsganj (R)	Ram Swarup	Cong.
458.	Saharanpur (R)	Sunder Lal	Cong.
459.	Saidpur (R)	Shambhu Nath	Cong.
460.	Salempur	Tarkeshwar Pande	Cong.
461.	Shahabad	Dharamgaj Singh	Cong.
462.	Shahjahanpur	Jitendra Prasad	Cong.
463.	Sitapur	Jagdish Chandra Dikshit	Cong.
464.	Sultanpur	Kedar Nath Singh	Cong.
465.	Tehri Garhwal	Paripoornanand Painuli	Cong.
466.	Unnao	Ziaur Rahman Ansari	Cong.
467.	Varanasi	Rajaram Shastri	Cong.
	West Bengal (40)		
468.	Alipore	Indrajit Gupta	CPI
469.	Arambagh	Manoranjan Hazra	CPI (M)
470.	Asansol	Robin Sen	CPI (M)
471.	Ausgram (R)	Krishna Chandra Halder	CPI (M)
472.	Balurghat (R)	Rasendra Nath Barman	Cong.
473.	Bankura	Shankar Narayan Singh Deo	Cong.
474.	Barasat	Ranen Sen	CPI
475.	Barrackpore	Mohammad Ismail	CPI (M)
476.	Basirhat	A. K. M. Ishaque	Cong.
477.	Berhampore	Tridib Chaudhuri	UA
478.	Birbhum (R)	Gadadhar Saha	CPI (M)
479.	Bolpur	Saradish Roy	CPI (M)
480.	Burdwan	Somnath Chatterjee	CPI (M)
481.	Calcutta North-East	Hirendra Nath Mukerjee	CPI
482.	Calcutta North-West	A. K. Sen	Cong.
483.	Calcutta South	P. R. Das Munsi	Cong.
484.	Contai	Samar Guha	SP
485.	Cooch Behar (R)	Benoy Krishna Daschowdhury	Cong.
486.	Darjeeling	Rattanlal Brahman	CPI (M)
487.	Diamond Harbour	Jyotirmoy Bosu	CPI (M)
488.	Ghatal	Jagadish Bhattacharyya	CPI (M)
489.	Hooghly	Bijoy Modak	CPI (M)
490.	Howrah	Samar Mukherjee	CPI (M)
491.	Jalpaiguri (R)	Tuna Oraon	Cong.
492.	Jangipur	Haji Lutfal Haque	Cong.
493.	Jhargram (R)	A. K. Kisku	Cong.
494.	Jaynagar (R)	Sakti Kumar Sarkar	Cong.
495.	Katwa	Saroj Mukherjee	CPI (M)
496.	Krishnagar	R. P. Das	CPI (M)
497.	Malda	Dinesh Joarder	CPI (M)
498.	Mathurapur (R)	Madhuryya Haldar	CPI (M)
499.	Midnapore	Subodh Chandra Hansda	Cong.
500.	Murshidabad	Muhammed Khuda Buksh	Cong.
501.	Nabadwip (R)	Smt Bibha Ghosh Goswami	CPI (M)
502.	Purulia	Vacant	
503.	Raiganj	Smt Maya Ray	Cong.
504.	Serampore	Dinen Bhattacharya	CPI (M)
505.	Tamluk	Satish Chandra Samanta	Cong.
506.	Uluberia	Shyamaprasanna Bhattacharyya	CPI (M)
507.	Vishnupur (R)	Ajit Kumar Saha	CPI (M)
	Delhi (7)		
508.	Chandni Chowk	Smt Subhadra Joshi	Cong.
509.	Delhi Sadar	Vacant	
510.	East Delhi	H. K. L. Bhagat	Cong.
511.	Karol Bagh (R)	T. Sohan Lal	Cong.
512.	New Delhi	Smt Mukul Banerji	Cong.
513.	Outer Delhi	Chaudhry Dalip Singh	Cong.
514.	South Delhi	Shashi Bhushan	Cong.

1	2	3	4
	Goa, Daman and Diu (2)		
515.	Panjim	Purushottam Kakodkar	Cong.
516.	Marmagoa	Erasmo De Sequeira	BLD
	Other Union Territories (7)		
517.	Andaman and Nicobar Islands	K. R. Ganesh	Cong.
518.	Arunachal Pradesh (R)[1]	C. C. Gohain	Cong.
519.	Chandigarh	Amar Nath Vidyalankar	Cong.
520.	Dadra and Nagar Haveli (R)	Ramubhai Ravjibhai Patel	Cong.
521.	Lakshadweep (R)	P. M. Sayeed	Cong.
522.	Mizoram (R)	Sangliana	Cong.
523.	Pondicherry	Aravinda Bala Pajanor	ADMK
	Anglo-Indians (2)[1]		
524.	—	Frank Anthony	UIPG
525.	—	Smt Marjorie Godfrey	UIPG

[1]Nominated by the President.

3 CIVILIAN AWARDS 1975

Bharat Ratna

The award is made for exceptional work for the advancement of art, literature and science and in recognition of public service of the highest order.

Recipient

Shri Varahagiri Venkata Giri.

Padma Vibhushan

The award is made for exceptional and distinguished service in any field, including service rendered by Government servants.

Recipients

1. Dr Basanti Dulal Nag Chaudhuri, Vice-Chancellor, Jawaharlal Nehru University, New Delhi.
2. Dr Chintaman Dwarkanath Deshmukh, President, India International Centre, New Delhi.
3. Dr (Smt) Durgabai Deshmukh, Advocate, Supreme Court, New Delhi.
4. Shri Homi Nusserwanji Sethna, Chairman, Atomic Energy Commission, Bombay.
5. Smt Madurai Shanmugavadivu Subbulakshmi, Musician, Madras.
6. Smt Mary Clubwala Jadhav, Social Worker, Madras.
7. Dr (Smt) Premlila Vithaldas Thackersey, Educationist, Bombay.
8. Dr Raja Ramanna, Director, Bhabha Atomic Research Centre, Bombay.

Padma Bhushan

The award is made for distinguished service of high order in any field including service rendered by Government servants.

Recipients

1. Begum Akhtar, Musician, Uttar Pradesh (posthumous).
2. Dr (Smt) Asima Chatterjee, Dean, Faculty of Science, University College of Science, Calcutta.
3. Shri Balai Chand Mukhopadhyaya, Writer, Calcutta.
4. Dr Darab Jehangir Jussawalla, Director, Tata Memorial Hospital, Bombay.
5. Dr Dilbagh Singh Athwal, Assistant Director, International Rice Research Institute, Manila.
6. Prof Kirpal Singh Narang, Vice-Chancellor, Punjabi University, Patiala.
7. Dr Madhav Sadashiv Gore, Director, Tata Institute of Social Science, Bombay.
8. Shri Phirozeshah Ardeshir Narielwala, Industrialist, Bombay.
9. Dr Padmanabha Krishnagopala Iyengar, Director, Physics Group, Bhabha Atomic Research Centre, Bombay.
10. Dr Pancheti Koteswaram, Director-General of Observatories, New Delhi.

11. Dr Pratul Chandra Gupta, Vice-Chancellor, Vishva Bharati University, Santiniketan, West Bengal.
12. Shri Raj Kumar Khanna, Honorary Secretary, All India Lawn Tennis Association, New Delhi.
13. Smt Ratna Shastri, Vice-President, Banasthali Vidyapith, Jaipur.
14. Shri Ronald Carltonvivian Piadade Noronha, formerly Chief Secretary, Madhya Pradesh, Bhopal.
15. Dr Vasudev Vishnu Mirashi, Sanskrit Scholar, Nagpur.

Padma Shri

The award is made for distinguished service in any field including service rendered by Government servants.

Recipients

1. Shri Ajit Chandra Chatterjee, Managing Director, Mining and Allied Machinery Corporation Limited, Durgapur, West Bengal.
2. Dr Ali Mohammad (Jan), Formerly Professor of Medicine, Government Medical College, Srinagar.
3. Shri Amjad Ali Khan, Sarod Player, New Delhi.
4. Dr Anil Kumar Ganguly, Director, Chemical Group, Bhabha Atomic Research Centre, Bombay.
5. Shri Arjan Singh, Wild Life Expert, Kheri, U.P.
6. Smt Arjumand Wahabuddin Ahmed, Social Worker, Hyderabad.
7. Shri Bachubhai Ravat, Editor, *Kumar*, Ahmadabad.
8. Shri Basavraj Rajguru, Vocalist, Dharwar, Karnataka.
9. Shri Bishan Saroop Bansal, Formerly Commissioner for Indus Waters, Government of India, New Delhi.
10. Dr Dhanpat Rai Nagpaul, Director, National Tuberculosis Institute, Bangalore.
11. Shri Gitchandra Tongbra, Play-wright and Drama-Director, Manipur.
12. Shri Gopi Krishna, Dancer, Bombay.
13. Shri Gundu Bandopant Meemamsi, Additional Director, Tele-Communications Research Centre, New Delhi.
14. Smt Malati Barua, Social Worker, Gauhati.
15. Kum Ivy Khan, National General Secretary, Young Women's Christian Association, New Delhi.
16. Smt Jagdamba Devi, Madhubani Paintings, Madhubani, Bihar.
17. Shri Jatindra Mohan Datta, Scholar and Writer, Calcutta.
18. Pandit Jasraj, Musician, Bombay.
19. Prof Kalpathi Ganapathi Subramanyan, Dean, Faculty of Fine Arts, M.S. University, Baroda.
20. Shri Kalyanam Raghu Ramaiah, Stage and Film Actor, Hyderabad.
21. Shri Kettassery Joseph Jesudas, Musician, Trivandrum.
22. Shri Krishna Prasad Dar, Formerly Manager, Allahabad Law Journal Press, Allahabad.
23. Smt Lhingjaneng Gangte, Chairman, Social Welfare Board, Manipur.
24. Shri Madras Sundaram Iyer Gopalkrishnan, Violinist, Madras.
25. Dr Mahadeo Lalji Shahare, Chairman, Agricultural Scientists Recruitment Board, New Delhi.
26. Dr (Smt) Mary Poonen Lukose, Formerly Surgeon-General, Trivandrum.
27. Shri Mathew M. Kuzhiveli, Writer, Trivandrum (Posthumous).
28. Shri M.S. Sathyu, Film Producer, Bombay.
29. Shri Nagapattinam Sambasiva Venkatesan, Director, Terminal Ballistics Research Laboratory, Chandigarh.
30. Shri Pankaj Lall Roy, Cricketer, Calcutta.
31. Brig Pessie Madan, Formerly General Manager, Bharat Electronics Ltd., Ghaziabad, U.P.
32. Shri Pradip Ranjan Roy, Scientific Officer, Bhabha Atomic Research Centre, Bombay.
33. Dr Pranab Rebatiranjan Dastidar, Head, Reactor Control Division, Bhabha Atomic Research Centre, Bombay.
34. Dr Rajagopala Chidambaram, Head, Neutron Physics Section, Bhabha Atomic Research Centre, Bombay.
35. Dr Reuben David, Veterinary Doctor, Ahmedabad.
36. Smt Sanjukta Panigrahi, Odissi Dancer, Bhubaneswar.
37. Dr Sekharipuram Narayana Aiyer Seshadri, Scientist, Bhaba Atomic Research Centre, Bombay.
38. Dr Shambhu Dayal Sinvhal, Director, State Observatory, Nainital, U.P.
39. Dr Stanley John, Professor and Head of Deptt. of Cardiovascular and Thoracic Surgery, Vellore Medical College, Tamil Nadu.
40. Shri Sudhakar Dwarkanath Soman, Health Physics Division, Bhabha Atomic Research Centre, Bombay.

41. Shri Suraj Mal Agarwal, Additional Secretary, Ministry of Communications, New Delhi.
42. Shri Syed Husain Ali Jaffri, Social Worker, New Delhi.
43. Shri Vishnu Shridhar Wakankar, Curator, Museum, Vikram University, Ujjain.

4 GALLANTRY AWARDS 1975

Param Vir Chakra The highest decoration for valour, the Param Vir Chakra, is awarded for the most conspicuous bravery or some daring or pre-eminent act of valour of self-sacrifice in the presence of the enemy, whether on land, at sea or in the air.

Recipient None

Maha Vir Chakra The Maha Vir Chakra, the second highest decoration, is awarded for acts of conspicuous gallantry in the presence of enemy, whether on land, at sea or in the air.

Recipient None

Vir Chakra The Vir Chakra is third in the order of awards given for acts of gallantry in the presence of the enemy, wether on land, at sea or in the air.

Recipients None

Ashok Chakra This medal is awarded for the most conspicuous bravery or some daring or pre-eminent act of valour or self-sacrifice on land, at sea or in the air.

Recipient None

Kirti Chakra This decoration is awarded for conspicuous gallantry.

Recipients

1. Maj Mohinder Singh Kadyan, Jat Regiment.
2. Shri Swarn Singh Boparai, Deputy Commissioner, Ferozepur.
3. Shri Zuheto Swu, Assistant Commandant, BSF.
4. Naib Subedar, Kalyan Singh, Assam Rifles.
5. Hav. J.S. Sen, Vr. C., Gorkha Rifles.

Shaurya Chakra This decoration is awarded for an act of gallantry.

Recipients 26

5 DISTINGUISHED SERVICE AWARDS 1975

Param Vishisht Seva Medal The Param Vishisht Seva Medal is awarded to personnel of all the three Services in recognition of distinguished service of the 'most exceptional' order.

Recipients 15

Ati Vishisht Seva Medal The Ati Vishisht Seva Medal is awarded to personnel of all the three Services in recognition of distinguished service of 'exceptional' order.

Recipients 48

Vishisht Seva Medal The Vishisht Seva Medal is awarded to personnel of all the three Services in recognition of distinguished service.

Recipients 53

6 UNIVERSITIES IN INDIA[1]

As on 1st August 1975

Name, location and year of establishment	Type	Number of colleges†	NUMBER OF STUDENTS: University deptts/university colleges	Affiliated Colleges	Pre-University, intermediate and pre-professional courses
1.	2.	3.	4.	5.	6.
1. Agra University, Agra (1927)	Affiliating	71	605	67,353	—
2. Aligarh Muslim University, Aligarh (1921)	Unitary	4	8,294	—	1,175
3. Allahabad University, Allahabad (1887)	Unitary	6	11,221	9,005	—
4. Andhra University, Waltair (1926)	Affiliating	115	5,496	44,429	37,508
5. Andhra Pradesh Agricultural University, Hyderabad. (1964)	Unitary	6	2,232	—	—
6. Annamalai University, Annamalainagar (1929)	Unitary	—	5,354	—	613
7. Assam Agricultural University, Jorhat (1968)	Unitary	3	659	—	—
8. *Awadh University, Faizabad (1975)	Affiliating	—	—	—	—
9. Awadesh Pratap Singh University, Rewa (1968)	Affiliating	49	—	12,780	—
10. Banaras Hindu University, Varanasi (1916)	Unitary	6	13,356	2,369	1,342
11. Bangalore University, Bangalore (1964)	Federal	58	3,370	28,757	16,731
12. Berhampur University, Berhampur (1967)	Affiliating	18	375	3,389	5,358
13. Bhagalpur University Bhagalpur (1960)	Affiliating	47	4,303	6,322	16,763
14. Bhopal University, Bhopal (1970)	Affiliating	23	—	15,383	—
15. *Bidan Chandra Krishi Vishwavidyalaya, Kalyani (1974)	Unitary	—	—	—	—
16. Bihar University, Muzaffarpur (1952)	Affiliating	66	5,066	9,662	22,983
17. Bombay University, Bombay (1857)	Federal	86	4,219	52,321	60,095
18. Burdwan University, Burdwan (1960)	Affiliating	55	2,391	49,633	5,354
19. Calcutta University, Calcutta (1857)	Affiliating	219	13,635	1,83,783	22,456
20. Calicut University, Calicut (1968)	Affiliating	66	337	23,982	27,583
21. Cochin University, Cochin (1971)	Federal	—	472	—	—
22. Delhi University, Delhi (1922)	Affiliating	66	19,850	55,110	123
23. Dibrugarh University, Dibrugarh (1965)	Affiliating	55	770	12,517	16,715
24. Garhwal University, Srinagar (Garhwal) (1973)	Affiliating	14	—	—	—
25. Gauhati University, Gauhati (1948)	Affiliating	117	3,515	29,929	43,308
26. Gobind Ballabh Pant University of Agriculture & Technology, Pantnagar (1960)	Unitary	6	2,086	—	—
27. Gorakhpur University, Gorakhpur (1957)	Affiliating	114	7,438	61,465	—
28. Gujarat Agricultural University, Ahmadabad (1972)	Unitary	5	1,428	—	324
29. Gujarat Ayurveda University, Jamnagar (1968)	Affiliating	10	345	2,256	—
30. Gujarat University, Ahmadabad (1949)	Affiliating	143	1,582	63,247	36,324
31. Guru Nanak Dev University, Amritsar (1969)	Affiliating	67	1,140	32,437	14,544
32. Haryana Agricultural University, Hissar (1970)	Unitary	6	1,639	—	17

33.	*Himachal Pradesh University, Simla (1970)*	Affiliating	40	1,853	10,465	3,997
34.	Hyderabad University, Hyderabad (1974)	Unitary	—	—	—	N.A.
35.	Indirakala Sangeet University, Kairagarh (1956)	Affiliating	28	48	—	—
36.	Indore University, Indore (1964)	Federal	21	399	17,017	—
37.	Jabalpur University, Jabalpur (1957)	Affiliating	28	828	16,728	—
38.	Jadavpur University, Calcutta (1955)	Unitary	2	4,371	322	—
39.	Jammu University, Jammu (1969)	Affiliating	15	1,603	6,882	3,090
40.	Jawaharlal Nehru Krishi Vishvavidyalaya, Jabalpur (1964)	Federal	11	1,936	—	—
41.	Jawaharlal Nehru Technological Institute, Hyderabad (1972)	Federal	5	3,259	—	—
42.	Jawaharlal Nehru University, New Delhi (1968)	Unitary	—	1,773	—	—
43.	Jiwaji University, Gwalior (1964)	Affiliating	38	144	20,605	—
44.	Jodhpur University, Jodhpur (1962)	Unitary	3	9,550	1,142	—
45.	Kalyani University, Kalyani (1960)	Affiliating	3	1,909	198	300
46.	Kameshwar Singh Darbhanga Sanskrit Viswavidyalaya, Darbhanga (1961)	Affiliating	46	—	—	—
47.	Kanpur University, Kanpur (1966)	Affiliating	85	—	60,433	—
48.	Karnatak University, Dharwar (1949)	Affiliating	114	6,112	36,743	26,924
49.	Kashi Vidyapith, Varanasi (1963)	Unitary	—	2,002	—	—
50.	Kashmir University, Srinagar (1948)	Affiliating	26	1,336	12,277	5,893
51.	Kerala University, Trivandrum (1937)	Affiliating	103	876	54,746	58,163
52.	Kerala Agricultural University, Trichur (1971)	Unitary	3	484	—	—
53.	Konkan Krishi Vidyapith, Dapoli (Maharashtra) (1972)	Unitary	2	576	—	—
54.	Kuamon University, Nainital (1973)	Affiliating	6	—	—	—
55.	Kurukshetra University, Kurukshetra (1956)	Unitary	5	4,081	1,282	585
56.	Lalit Narain Mithila University, Darbhanga (1972)	Affiliating	53	1,530	8,888	19,195
57.	Lucknow University, Lucknow (1921)	Unitary	22	12,943	12,630	—
58.	Madras University, Madras (1857)	Affiliating	159	1,199	1,03,239	51,866
59.	Madurai University, Madurai (1966)	Affiliating	95	883	44,858	21,946
60.	Maharaja Sayaji Rao University of Baroda, Vadodara (1949)	Unitary	1	16,266	—	3,589
61.	Magadh University, Bodhgaya (1962)	Affiliating	55	3,752	14,076	33,110
62.	Mahatma Phule Krishi Vidyapith, Rahuri (1968)	Federal	5	1,694	—	—
63.	Marathwada University, Aurangabad (1958)	Affiliating	82	3,238	36,790	21,338
64.	Marathwada Krishi Vidyapith, Parbhani (1972)	Unitary	2	978	—	—
65.	Meerut University, Meerut (1966)	Affiliating	55	106	51,272	—
66.	Mysore University, Mysore (1916)	Affiliating	132	6,517	53,516	31,519
67.	Nagpur University, Nagpur (1923)	Affiliating	139	3,417	57,633	31,092
68.	North Bengal University, Raja Ram Mohanpur (Darjeeling) (1962)	Affiliating	31	2,361	15,854	2,813
69.	North Eastern Hill University, Shillong (1973)	Affiliating	20	40	5,088	7,103
70.	Orissa University of Agriculture and Technology (Bhubaneswar) (1962)	Unitary	4	969	—	416
71.	Osmania University, Hyderabad (1918)	Affiliating	107	15,962	50,280	19,910
72.	Panjab University, Chandigarh (1947)	Affiliating	184	7,096	83,199	43,680
73.	Panjab Agricultural University, Ludhiana (1962)	Unitary	5	2,411	—	—
74.	Patna University, Patna (1917)	Unitary	11	7 695	961	4,454
75.	Poona University, Poona (1949)	Affiliating	115	3,436	64,698	30,657
76.	Panjabi University, Patiala (1962)	Affiliating	46	1,382	17,976	8,147

[1]Appendix to Chapter 5

1.	2.	3.	4.	5.	6.
77. Punjabrao Krishi Vidyapith, Akola (1969)	Federal	7	1,957	589	160
78. Rabindra Bharati University, Calcutta (1962)	Affiliating	40	4,461	—	—
79. Rajasthan University, Jaipur (1947)	Affiliating	137	11,421	63,070	3,281
80. Rajindra Agricultural University, Patna (1970)	Unitary	5	1,211	—	—
81. Ranchi University, Ranchi, (1960)	Affiliating	63	5,327	18,142	25,864
82. Ravi Shankar University, Raipur (1964)	Affiliating	57	437	22,183	—
83. *Rohilkand University, Bareilly (1975)	Affiliating	—	—	—	—
84. Roorkee University, Roorkee (1949)	Unitary	—	1,933	—	—
85. Sambalpur University, Sambalpur (1967)	Affiliating	29	2,010	8,288	4,566
86. Sardar Patel University, Vallabh Vidyanagar (1955)	Affiliating	18	1,355	7,859	3,541
87. Saugar University, Sagar (1946)	Affiliating	53	4,565	17,053	373
88. Saurashtra University, Rajkot (1965)	Affiliating	53	3,283	25,103	12,009
89. Shivaji University, Kolhapur (1962)	Affiliating	90	3,283	43,762	20,300
90. Shrimati Nathibai Damodar Thackersey Women's University, Bombay (1951)	Affiliating	21	3,896	3,884	4,596
91. South Gujarat University, Surat (1967)	Affiliating	33	169	15,311	7,822
92. Sri Venkateswara University, Tirupati (1954)	Affiliating	47	2,381	20,392	11,167
93. Tamil Nadu Agricultural University, Coimbatore (1971)	Unitary	4	2,037	—	—
94. Udaipur University, Udaipur (1962)	Affiliating	14	3,622	4,143	587
95. University of Agricultural Science, Bangalore (1964)	Unitary	6	2,418	—	—
96. Utkal University, Bhubaneswar (1943)	Affiliating	53	4,312	15,811	26,080
97. Varanasaya Sanskrit University, Varanasi (1958)	Affiliating	119	583	—	63
98. Vikram University, Ujjain (1957)	Affiliating	44	2,855	13,905	—
99. Visva-Bharati University, Santiniketan (1951)	Unitary	7	1,534	—	—
Institutions Deemed to be Universities:					
1. Birla Institute of Technology and Science, Pilani (1964)	Unitary	—	2,044	—	—
2. Central Institute of English and Foreign Languages, Hyderabad (1973)	Unitary	—	74	—	—
3. Gujarat Vidyapith, Ahmedabad (1963)	Unitary	—	612	—	—
4. Gurukul Kangri, Hardwar (1962)	Unitary	—	260	—	16
5. Indian Agricultural Research Institute, New Delhi (1958)	Unitary	—	495	—	—
6. Indian Institute of Science, Bangalore (1958)	Unitary	—	1065	—	—
7. Indian School of Mines, Dhanbad (1967)	Unitary	—	247	—	—
8. Jamia Millia Islamia, New Delhi (1962)	Unitary	—	977	—	33
9. Tata Institute of Social Sciences, Bombay (1964)	Unitary	—	170	—	—

* In the case of the three new Universities, viz. Avadh, Bidan Chandra Krishi and Rohilkhand, their statistics are not available separately regarding 'Colleges' and 'enrolment'. They have been included in the parent Universities concerned in the above table.

Note: Enrolment figures in respect of Indirakala Sangeet Vishwavidyalaya, Rabindra Bharati and Varanasaya Sanskrit Vishwavidyalaya relate to the 'main campus' only.

†Figures relate to 1973-74

**Three more Universities have been established: 1. Bundelkhand University, Jhansi (1975)
2. Chander Shekhar Azad University of Agricultural and Technology, Kanpur (1974-75)
3. Acharya Narender Dev University of Agricultural and Technology, Faizabad (1974-75)

7 LALIT KALA AKADEMI AWARDS 1974

No National Exhibition of Art was held during 1974.

8 SANGEET NATAK AKADEMI FELLOWSHIPS AND AWARDS 1974[1]

Fellowships	Smt Kamala Devi Chattopadhyay Shri Jnan Prakash Ghosh Smt M. S. Subbulakshmi.	
Awards		
Music	Shri Nikhil Ranjan Bannerjee	.. Hindustani—Instrumental (Sitar).
	Shri Kumar Gandharva	.. Hindustani — Vocal
	Shri T. N. Krishnan	.. Karnataka—Instrumental (Violin).
	Shri M. D. Bhagavathar Ramanathan	Karnataka—Vocal
Dance	Smt L. Ibemhal Devi	.. Manipuri
	Shri T. T. Ramankutty Nair	.. Kathakali
	Shri Tanjavur K. P. Kittappa	.. Bharata Natyam (Teaching)
	Shri Gauri Shankar Devilal Kathak	.. Kathak
Other dance and theatre forms	Shri Puna Ram	.. Folk Theatre (Pandavani)
	Shri Bhagban Sahu	.. Folk Dance (Orissa).
Drama	Shri Damodar Kashinath Kenkre	.. Direction
	Shri Pransukh Manilal Nayak	.. Acting (Gujarati)
	Shri Tapas Sen	.. Stage Technique
	Shri Duraiswami Sundaram	.. Playwiriting (Tamil)

9 SAHITYA AKADEMI AWARDS 1974[1]

Language	Book	Author
Assamese	*Golam* (Short Stories)	Saurabh Kumar Chaliha
Bengali	*Ulanga Raja* (Poems)	Nirendranath Chakravarti
Dogri	*Duddh Lahoo Zahar* (Short Stories)	Madan Mohan Sharma
Gujarati	*Tartamya* (Literary Criticism)	Anantrai Raval
Hindi	*Mitti Ki Barat* (Poems)	Shivmangal Singh 'Suman'
Kannada	*Vardhaman* (Poems)	M. Gopalakrishna Adiga
Malayalam	*Kamasurabhi* (Poems)	Vennikkulam Gopala Kurup
Manipuri	*Ilsa Amagi Mahao* (Short Stories)	N. Kunjamohan Singh
Marathi	*Natsamrat* (Drama)	V. V. Shirwadkar
Oriya	*Sabdara Akash* (Poems)	Sitakanta Mahapatra
Punjabi	*Jug Badal Gaya* (Novel)	Sohan Singh Sital
Rajasthani	*Batan Ri Phulwari* (Vol. X) (Folk Tales)	Vijaydan Detha
Sanskrit	*Shrishivarajyodyam* (Epic Poem)	S. B. Warnekar
Sindhi	*Hunaje Atam Jo Maut* (Novel)	Lal Pushp
Tamil	*Thirukkural Needhi Ilakkiyam* (Literary Criticism)	K. D. Thirunavukkarasu
Telugu	*Timiram Tho Samaram* (Poems)	Dasarathi
Urdu	*Nazar Aur Nazariya* (Literary Criticism)	Ale Ahmad Suroor

[1]Appendix to Chapter 6.

10 NATIONAL AWARD FOR FILMS 1974[1]

Category	Award	Film	Language	Awardee
ALL INDIA FILMS				
Best feature film	Rs 40,000 and swarna kamal (Gold Lotus)	Chorus	Bengali	Mrinal Sen Productions (Producer) Also Rs 15,000 and rajat kamal to Mrinal Sen (Director)
Second best feature film	Rs 15,000 and rajat kamal (Silver Lotus)	Ankur	Hindi	M/s Blaze Film Enterprises (Producer) Also Rs 10,000 and rajat kamal to Shyam Benegal (Director)
Best feature film on national integration	Rs 30,000 and rajat kamal	Parinay	Hindi	Samantar Chitra Pvt. Ltd. (Producer). Also Rs 10,000 and rajat kamal to Kantilal Rathod (Director)
Best feature film on the occasion of 25th anniversary of India's Independence	Rs 30,000 and rajat kamal	Uttarayanam	Malayalam	Pattathuvila Karunakaran (Producer). Also Rs 10,000 and rajat kamal to Aravindan (Director)
Special award for feature film with mass appeal, wholesome entertainment and aesthetic value	Swaran kamal	Kora Kagaz	Hindi	M/s Shreeji Films (Producer). Also rajat kamal to Anil Ganguly (Director)
Excellence in direction	Rs 20,000 and rajat kamal	Sonar Kella	Bengali	Satyajit Ray
Excellence in black and white cinematography	Rs 5,000 and rajat kamal	Chorus	Bengali	K. K. Mahajan (Cameraman)
Excellence in colour cinematography	Rs 5,000 and rajat kamal	Sonar Kella	Bengali	Soumyendu Roy (Cameraman)
Best Actor	Rajat kamal	Ankur	Hindi	Sadhu Meher
Best actress	Rajat kamal	Ankur	Hindi	Shabana Azmi
Best child actor/actress	Rajat kamal	Sonar Kella	Bengali	Kushal Chakraborty
Best male playback singer	Rajat kamal	Rajnigandha	Hindi	Mukesh
Best female playback singer	Rajat kamal	Kora Kagaz	Hindi	Lata Mangeshkar
Best music director	Rs 10,000 and rajat kamal	Chorus	Bengali	Anand Shankar

[1]Appendix to Chapter 10

Best screenplay	Rs 10,000 and rajat kamal	Sonar Kella	Bengali	Satajit Ray
Best story	Rs 10,000 and rajat kamal	Jukti Takko Aur Gappo	Bengali	Ritwick Ghatak
Best lyric	Rs 5,000 and rajat kamal	Alluri Sita Rama Raju	Telugu	Sri Shri
Best Information film	Rs 5,000 and rajat kamal	Man in search of man	English	G.P. Asthana (Producer). Also Rs 4,000 and rajat kamal to Prem Vaidya (Director)
Best educational/instructional film	Rs 5,000 and rajat kamal	Atom	English	Lala Pramod Pati (Producer). Also. Rs 4,000 and rajat kamal to M.M Chaudari (Director)
Best social documentation film	Rs 5,000 and rajat kamal	Behind the bread lime	English	S. Sukhdev (Producer and Director)
Best promotional film (commercial)	Rajat kamal	To serve is to love	English	M/s Cinerad Communications (Producer). Also rajat kamal to Zafar Rai (Director)
Best promotional film (non-commercial)	Rajat kamal	Ek Anek Aur Ekta	English	Bhim Sen (Producer). Also rajat kamal to Vijay Mulay (Director)
Best animation film	Rs 5,000 and rajat kamal	Synthesis	English	B. R. Shendge (Producer). Also Rs 4,000 and rajat kamal to A.R. Sen and B. R. Dohling (Director)
Best short film on the occasion of 25th anniversary of India's independence	Rs 5,000 and rajat kamal	I	English	Krishnaswamy Associates Pvt. Ltd. (Producer). Also Rs 4,000 and rajat kamal to S. Krishnaswamy (Director)
FILMS IN REGIONAL LANGUAGES[1]	Rs 10,000 and rajat kamal	Sonar Kella	Bengali	Inforamation and Public Relations Deptt. Government of West Bengal (Producer)
	—do—	Kankana	Kannada	Mayura Films (P) Ltd. (Producer). Also Rs 5,000 and rajat kamal to M.B.S. Prasad (Director)
	—do—	Uttarayanam	Malayalam	Pattathuvila Karunakaran (Producer). Also Rs 5,000 and rajat kamal to Aravindan (Director)

[1]The awards are for the best feature films

11 ESSAY IN DISCIPLINE AND ECONOMIC REGENERATION

(A Chronology of Important Events following the Proclamation of Emergency)

JUNE

25 President declares a state of grave emergency due to existence of a threat to the security of India from internal disturbance.

26 In a broadcast to the nation Prime Minister says, the actions of a few are endangering the rights of the vast majority and the country's integrity demands firm action.

29 President issues an ordinance amending the Maintenance of Internal Security (Amendment) Act under which no grounds need be given for detention.

JULY

1 Prime Minister in a broadcast to the nation announces a package of economic measures—the 20-Point Economic Programme.

— Under an ordinance amending the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act persons detained under the Act need not be given grounds for detention and such detentions need not be referred to any advisory board during the emergency

2 Alleged smugglers including Yusuf Patel, Sukur Naran Bakhia and Nainmal Punjaji Shah detained.

— Sikkim Government, in its first ordinance, bans eviction of any cultivator from his land.

4 The union government bans 26 organisations and groups including Rashtriya Swayamsevak Sangh, Jammat-e-Islami-e-Hind, Anand Marg and Naxalite groups.

— Government issues instructions for strict measures for the enforcement of punctuality.

— Ragging in colleges all over India prohibited.

6 Acharya Vinoba Bhave welcomes the declaration of emergency as an era of discipline.

9 Special income-tax squads appointed in four metropolitan cities to check investment of black money in luxury houses.

10 Madhya Pradesh Government prematurely retires 16 senior officials including 11 Deputy Superintendents of Police.

11 An ordinance issued in Madhya Pradesh to enable temporary acquisition of culturable land in the command areas of major irrigation projects for land development work.

14 The number of anti-smuggling raids and searches shoot up by over 300 per cent during the first ten days of July following the announcement of the 20-Point Economic Programme.

16 An ordinance issued to further amend the Maintenance of Internal Security Act. It provides that no person including a foreigner detained under the Act can claim a right to personal liberty by virtue of natural or common law.

22 An ordinance issued in Uttar Pradesh prohibiting bonded labour with immediate effect.

— An ordinance promulgated in Tamil Nadu prohibiting any suit in any court of law for recovery of debts from the weaker sections of society, excluding the agriculturists, for whom a separate provision has already been made.

30 Parliament passes the Taxation Laws (Amendment) Bill making various direct taxation acts more stringent.

— A review of the current economic situation presented to Parliament by the Finance Minister says, India has achieved a negative rate of inflation, made possible by a combination of monetary and fiscal policies coupled with vigorous action against economic offences.

— Shrimati Gayatri Devi, MP, detained under the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act.

31 President gives assent to the Finance (Amendment) Act raising the income-tax exemption limit from Rs 6,000 to Rs 8,000 as laid down in the 20-Point Programme.

AUGUST

6 Uttar Pradesh Assembly passes the Rural Weaker Sections (Moratorium on Recovery of Debts) Bill.

9 Kerala Assembly adopts the Kerala Debtors' (Temporary Relief) Bill, 1975, providing for one year's moratorium on debts of agriculturists, village artisans and landless workers.

— A comparative study of retail prices of essential commodities from 22 June to 22 July shows a steady decline in the prices of almost all items after the declaration of emergency.

— Haryana Assembly passes a Bill imposing one-year moratorium on actions for recovery of loans from agriculturists.
— West Bengal Assembly passes the West Bengal Rural Indebtedness Relief Bill providing for a two-year moratorium.
15 Goa announces one-year moratorium on loans sanctioned to farmers.
25 A Reserve Bank of India Bulletin says, 1974-75 witnessed the lowest rate of expansion of money supply during the last 13 years—only six per cent against 19 per cent in each of the three preceding years.
27 An ordinance is promulgated in Andhra-Pradesh providing for a one-year moratorium on debts payable to private moneylenders by small farmers, landless labourers and artisans in rural areas.
28 So far 32,42,406 house sites including undeveloped ones allotted to landless labourers in all the states.
— Passports of 600 economic offenders have been impounded since the declaration of emergency.
29 Government sets up two control rooms: (i) to monitor round-the-clock production efficiency of public sector undertakings and (ii) to take remedial action whenever necessary to maintain uninterrupted production.
— An ordinance prohibits bonded labour in Andhra Pradesh.

SEPTEMBER

2 In Andhra Pradesh, 15 gazetted officers in the police department are retired on grounds of inefficiency and corruption.
— Since the emergency, punctuality in the railways goes up to 95 per cent and action against ticketless travellers increases ticket sales by about 30 per cent.
3 As part of the intensive campaign to root out corruption and inefficiency in public services, the central and state governments have undertaken a review of the cases of all officers between the age of 50 and 55.
— West Bengal issues an ordinance providing for total debt relief to landless labourers and the poorest sections of the peasantry.
5 During the first four months of the current financial year, collection of income tax, including corporate tax shot up by 21.8 per cent.
6 Meghalaya Government fixes minimum wages of agricultural labourers.
10 In Rajasthan, an ordinance is promulgated making bonded labour a cognisable and non-bailable offence.
13 In Andhra Pradesh, an ordinance is promulgated to amend the land acquisition act to speed up acquisition and to enable the government to provide more house sites to the poor.
— Madhya Pradesh Government decides to distribute all government arable land to the landless rural poor, particularly Adivasis and Harijans.
16 So far, 10 class I and 7 Class II railway officers above the age of 50 have been compulsorily retired and 6 other class I officers either reverted or sent on leave preparatory to retirement.
— The Union Public Service Commission has so far retired four of its officers between the age 50 and 55 after reviewing their cases.
18 Bihar decides to give representation to workers in the boards of directors of different corporations in the state.
24 In Uttar Pradesh, nine new schemes are sponsored under the Uttar Pradesh Public Moneys (Recovery of Dues) Act for ensuring institutional finance to the weaker sections.
— The central government formulates a Rs 25-crore scheme to assist landless labourers and scheduled castes and scheduled tribes benefiting from land reforms in the cultivation of their lands.
25 The central government issues an ordinance reducing the minimum bonus of workers to 4 per cent and defines the concept of bonus as being payable in future only on the basis of profits, production or productivity. No bonus will be paid if there is no surplus at all.
26 President promulgates three ordinances: (I) to ensure equal wages to men and women for the same work, (ii) to establish regional rural banks in the country for meeting the credit needs of farmers and (iii) to promote speedier movement of public carriers through grant of national permits.
27 Osmania University rusticates 117 students for indulging in corrupt practices in examinations.

OCTOBER

1 Industrial production in the first quarter of 1975-76 is estimated to have increased by 5 to 6 per cent and the output in public sector enterprises went up by nearly 14 per cent as compared to the corresponding period last year.
2 Five regional rural banks opened at Moradabad and Gorakhpur in Uttar Pradesh, Bhiwani in Haryana, Jaipur in Rajasthan and Malda in West Bengal.
— The Packaged Commodities Regulation Order comes into force. It requires manufacturers or packers of all commodities sold in packages to carry infor-

mation regarding price, month and year of manufacture and weight and measure.

— Uttar Pradesh Government is to give free legal aid and financial help to the scheduled castes, scheduled tribes and denotified tribes and landless labourers, to pursue court cases.

3 The remittances of foreign exchange almost doubled to Rs 85.66 crores in July 1975 from Rs 46.83 crores in July 1974.

— Since the proclamation of emergency, over 1,990 central government servants have been retired for inefficiency or doubtful integrity.

7 As part of the new national economic programme, Kerala Government has drawn up a time-bound one-year crash programme for conferring land and proprietory rights on 1.13 million more landless persons.

8 Under a new scheme promulgated through Presidential ordinance, tax-evaders are to get reprieve till 31 December for voluntary disclosure of unaccounted taxable income and wealth.

10 Himachal Pradesh Government allots house sites to all homeless families in rural areas. Five-bigha plots were allotted earlier to all landless agricultural workers.

11 Madhya Pradesh Governor promulgates an ordinance freeing industrial workers earning up to Rs 500 a month from all debts.

— Bihar Chief Minister announces the formation of a 16-member legal aid board under his chairmanship.

12 An all-India survey of retail prices conducted by the Department of Civil Supplies and Cooperation shows that there has been a substantial fall in the retail prices of a number of essential commodities during the past one year. The price of rice has fallen by 8 to 12 per cent in some states, whiie that of wheat has declined by 8 to 38 per cent.

15 About four lakh women in the plantation industry get wages equal to men.

17 Goa Government promulgates an ordinance providing for temporary relief from indebtedness to agricultural labourers and rural artisans in the union territory.

— In Haryana, about 1.2 lakh landless Harijans and other members of the backward classes have so far been allotted free residential plots in the state.

20 Book banks have been set up in 1,155 colleges all over the country to help the poor students. Vigorous measures have also been taken to provide essential commodities to hostel students at reasonable prices in pursuance of the 20-Point Economic Programme.

— Licences of 9,498 industrial units, which were found either closed or non-existent, cancelled in Uttar Pradesh.

24 Bonded labour becomes illegal with immediate effect under a Presidential ordinance.

— Government attaches properties of six absconding smugglers valued at more than Rs 73 lakhs. Similar action has been initiated against 220 absconding smugglers.

27 Manipur Government promulgates an ordinance to provide relief from indebtedness to agricultural labourers, rural artisans, marginal farmers and small farmers.

NOVEMBER

1 Twenty-one more foreign exchange racketeers detained under the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act bringing the overall detentions to 192.

— The passenger revenue in the railways gone up by Rs 2.5 crores as a result of the virtual eradication of ticketless travelling.

2 In pursuance of Prime Minister's New Economic Programme, Uttar Pradesh Government has notified seven more schemes, formulated by the banks as state-sponsored schemes for the benefit of economically weaker sections.

4 An ordinance promulgated providing for imposition of heavy penalties for misuse of import and export licences.

— Kerala Government announces extension of workers' participation to the state-owned road transport corporation having about 20,000 workers on its rolls.

5 An ordinance issued providing for the confiscation of the illegally acquired property of smugglers, foreign exchange manipulators and their friends and associates.

— In Madhya Pradesh 2,800 state government employees retired since the proclamation of emergency on grounds of inefficiency or doubtful integrity.

7 In Bihar, about seven lakh Harijan families given possession of homestead land so far.

13 Himachal Pradesh Governor promulgates an ordinance providing relief from indebtedness to landless agricultural labourers, marginal farmers, rural artisans and small farmers.

14 About fifty lakh house sites allotted to the rural poor, mainly landless Harijans under the New Economic Programme.
15 Smuggling brought down to around 10 to 15 per cent of the magnitude a year ago as a result of the anti-smuggling measures.
19 In pursuance of the New Economic Programme, 8,500 employees of the Hyderabad Division of the Bharat Heavy Electricals Limited become partners in the management of the undertaking.
— Karnataka Government promulgates an ordinance to regulate orderly development of urban areas, considered necessary to implement the New Economic Programme regarding distribution of house sites to the siteless and socialisation of urban lands.
— The union government asks the states to set up advisory committees headed by respective Chief Ministers to ensure workers' participation in management. Public sector undertakings told to complete the establishment of councils at shop-floor and plant levels within three months.
21 A record production of Rs 785.69 lakhs in October, over 93 per cent of the target, reported by public sector undertakings under the control of the Department of Industrial Development.
29 Orissa Government announces a scheme for workers' participation in the management of manufacturing and mining industries in the public, private and co-operative sectors employing over 250 persons.

DECEMBER

1 Tighter vigilance against pilferers and closer attention to engine maintenance and rationalised use of coal by crew helps the Eastern Railway to save Rs 10 lakhs per month since August.
2 In Andhra Pradesh, over three lakh acres of land have been distributed to nearly 1.32 lakh beneficiaries since 1 April.
3 In Uttar Pradesh, over 11 lakh persons have been given house sites so far. Of them, nearly 50,000 have already taken possession.
— The combined impact of the measures taken in recent months and favourable weather conditions have resulted in the reversal of the declining trend in agricultural production. The normal seasonal pressures on prices during the lean season, May to September, have been held down.
— All public sector steel plants maintained upward swing in production last month. Total production of saleable steel was 4,88,000 tonnes in the month, an increase of 16.5 per cent over the same period last year.
4 The wholesale price index continues its downward trend. The general price level recorded decline of 5.4 per cent over the year ended 15 November 1975 as against an increase of 22.8 per cent in the preceding twelve months.
5 The Rajasthan government has compulsorily retired 1,900 government employees so far in an effort to tone up the administrative machinery.
6 The Uttar Pradesh government sponsors ten additional schemes for commercial banks to assist economically weaker sections of society to implement the Prime Minister's 20-Point Economic Programme.
7 In Patna, the international conference against fascism expresses its full support to India in its fight to defend democracy and struggle against imperialist and fascist machinations.
— The drive against ticketless travel has resulted in increased window sale of tickets. From April to September 1975, over 136 crores of tickets were sold on all the zonal railways, about 24 crores more than the corresponding period last year.
8 Three ordinances are promulgated to prohibit publication of objectionable matter with immediate effect, withdraw the immunity conferred by the Parliamentary Proceedings (Protection of Publication) Act of 1956 and repeal the Press Council Act of 1965.
11 To ensure efficient and clean administration, the Ministry of Commerce has compulsorily retired 60 officials. These include 29 gazetted officers.
12 The Rajasthan government takes over the "*Khadeen*" land of the former ruler of Jaisalmer under the Land Reform and Estate Owner Acquisition Act, 1963.
13 The first multipurpose distribution centre set up by public sector oil companies to augment the public distribution sytem in rural areas is opened at Bahalgarh in Haryana.
14 The Conservation of Foreign Exchange and Prevention of Smuggling Activities Act (COFEPOSA) is amended by a Presidential ordinance. It links the period of detention of offenders under the Act to the Emergency.
18 The Meghalaya Assembly passes the Rural Indebtedness Relief Bill. The Bill seeks to give relief to marginal farmers, small farmers, artisans and agricultural labourers in rural areas from indebtedness by way of moratorium on the recovery of debts by private money-lenders, initially for a period of one year.

— In Rajasthan, 1,642 book banks have been opened in educational institutions.
20 In Orissa, more than 91,000 acres of land has been distributed among 58,745 landless people so far.
— 18 officers of the Ministry of Information and Broadcasting, of whom 11 are gazetted officers, are prematurely retired.
23 India's foreign exchange reserves swelled by Rs 444 crores in the 14 months since COFEPOSA in the form of remittances from abroad through regular channels, following the crackdown on smugglers and on the compensatory payments racket.
25 Six more foreign exchange racketeers detained under the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act at the instance of the Enforcement Directorate bringing the total number to 218.
30 The Uttar Pradesh Government issues an order asking industrial units in public, private and cooperative sectors to introduce the scheme for workers' participation with immediate effect.
31 The all out offensive launched against economic crimes during the year has not only severely curbed smuggling and black money operations but is also expected to yield an additional Rs 300 to Rs 350 crores as taxes and deposits.

12 THE 20-POINT ECONOMIC PROGRAMME

1. Continuance of steps to bring down prices of essential commodities. Streamlined production, procurement and distribution of essential commodities. Strict economy in government expenditure.
2. Implementation of agricultural land ceilings and speedier distribution of surplus land and compilation of land records.
3. Stepping up of provision of house sites for landless and weaker sections.
4. Bonded labour, wherever it exists, will be declared illegal.
5. Plan for liquidation of rural indebtedness. Legislation for moratorium on recovery of debt from landless labourers, small farmers and artisans.
6. Review of laws on minimum agricultural wages.
7. Five million more hectares to be brought under irrigation. National programme for use of underground water.
8. An accelerated power programme. Super thermal stations under central control.
9. New development plan for development of handloom sector.
10. Improvement in quality and supply of people's cloth.
11. Socialisation of urban and urbanisable land. Ceiling on ownership and possession of vacant land and on plinth area of new dwelling units.
12. Special squads for valuation of conspicuous construction and prevention of tax evasion. Summary trials and deterrent punishment of economic offenders.
13. Special legislation for confiscation of smugglers' properties.
14. Liberalisation of investment procedures. Action against misuse of import licences.
15. New schemes for workers' association in industry.
16. National permit scheme for road transport.
17. Income Tax relief to middle class; exemption limit placed at Rs 8,000.
18. Essential commodities at controlled prices to students in hostels.
19. Books and stationery at controlled prices.
20. New apprenticeship scheme to enlarge employment and training, especially of weaker sections.

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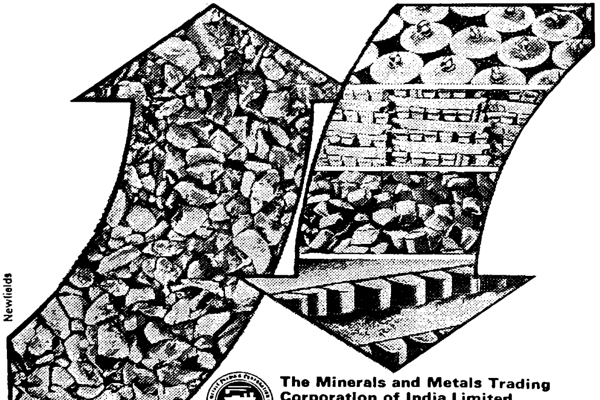
Midas of Greek Mythology, used to turn everything he touched into gold. MMTC does not create gold, yet the Midas touch is there. The Corporation is just one of the institutions of the Government of India created specifically to earn and conserve no less a precious asset than gold, namely Foreign Exchange. Through exports of minerals it has been earning foreign exchange; through judicious imports of non-ferrous metals, and a variety of other industrial raw materials it has been saving foreign exchange.

Total mineral exports of the country during 1973-74 were of the order of Rs. 175 crores MMTC's contribution was Rs.125 crores. This has now risen to about Rs 140 crores in 1974-75

The range of items imported by the Corporation has increased from year to year. Beginning with a single item, namely copper, the Corporation today imports more than 50 different raw materials, ranging from non-ferrous metals to fertilizers and raw materials for fertilizers. As a result of proper procurement planning MMTC is today in a position to supply all the raw materials it imports on an "off-the-shelf" basis.



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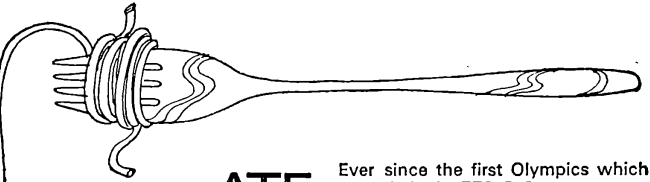

ATE 100 YARDS IN 42 SECONDS

Ever since the first Olympics which were held in 776 B.C., contestants have vied with each other to set up new records of speed, strength and endurance.

This page is devoted not to these worthy record holders of recognised Olympic sporting events but to those largely unmentioned, little-known men and women who have raised ordinary everyday chores to new heights of endurance.

The spaghetti eating record is held by Tom L Cresci. He consumed 262.6 yards (2.1 lbs). The fastest spaghetti eating record is 100 yards in 42.0 seconds.

The greatest distance achieved at the annual tobacco-spitting classic is 25 feet 10 inches by Don Snyder at Raleigh, Mississippi in August, 1970. Distance is dependent on the quality of salivation, absence of cross wind and two finger pressure. Sprays smaller than a dime do not count.

The fastest barber on record is Gerry Harley of Kent, England. He shaved 130 men in 60 minutes. In setting a marathon record he ran out of volunteers.

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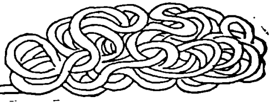

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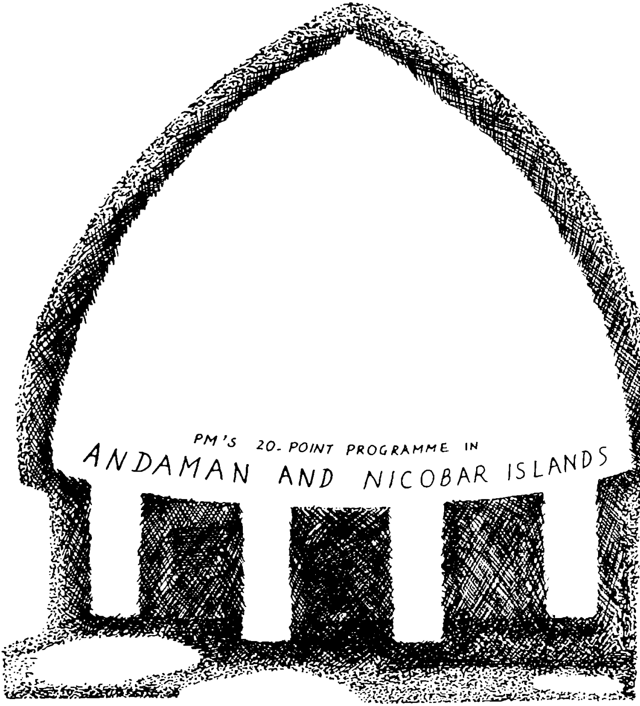

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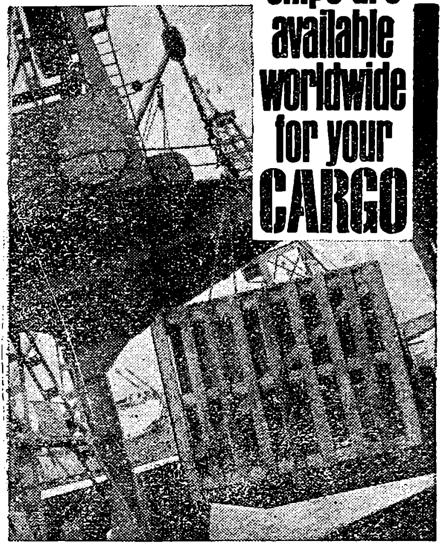

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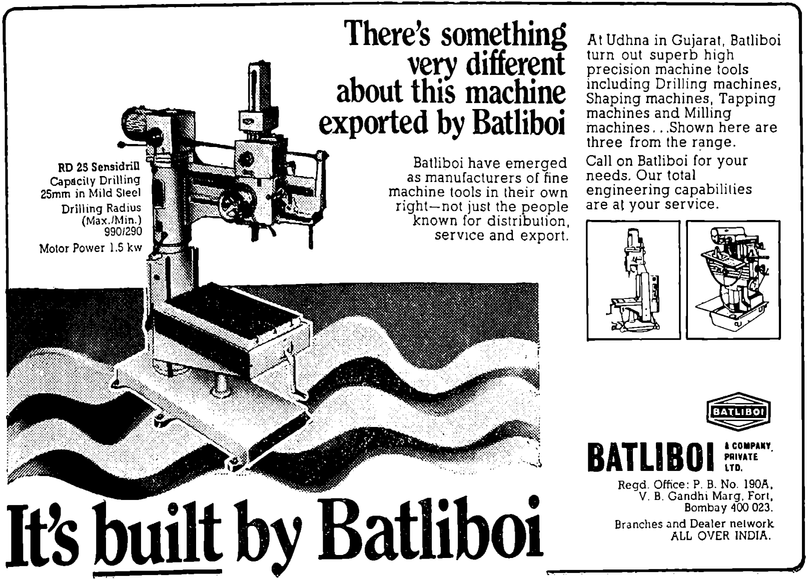
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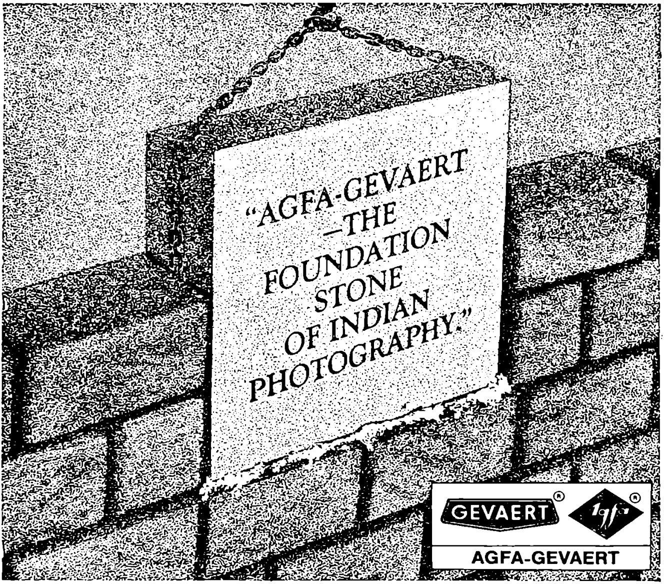

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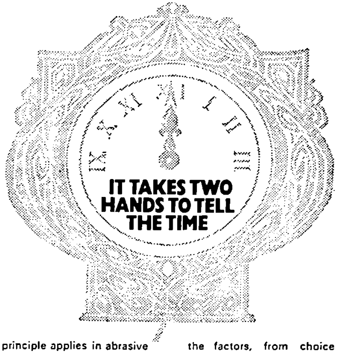

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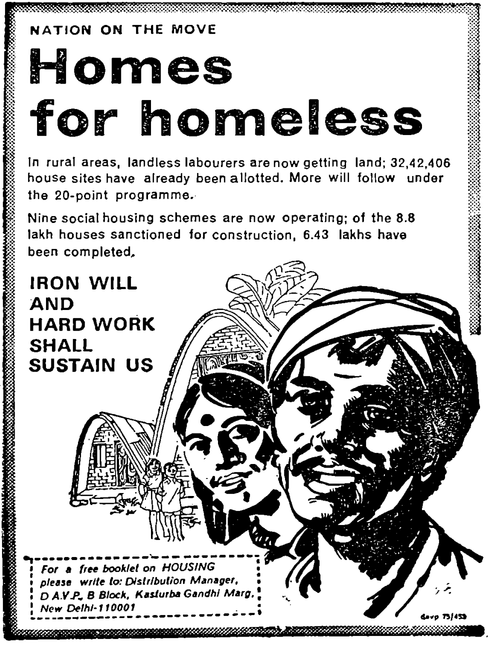
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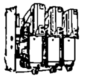
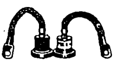
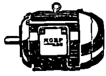
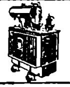
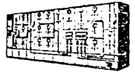

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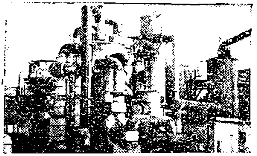

Our Sulphuric Acid Plant at the Indian Copper Complex, Ghatsila inaugurated on 17th January 1975 by the Union Minister of State for Steel & Mines, Shri Chandrajit Yadav.

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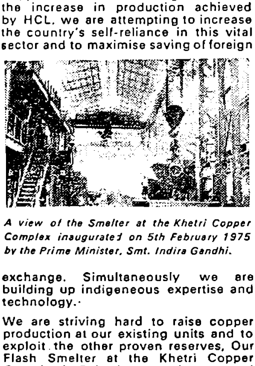

A view of the Smelter at the Khetri Copper Complex inaugurated on 5th February 1975 by the Prime Minister, Smt. Indira Gandhi.

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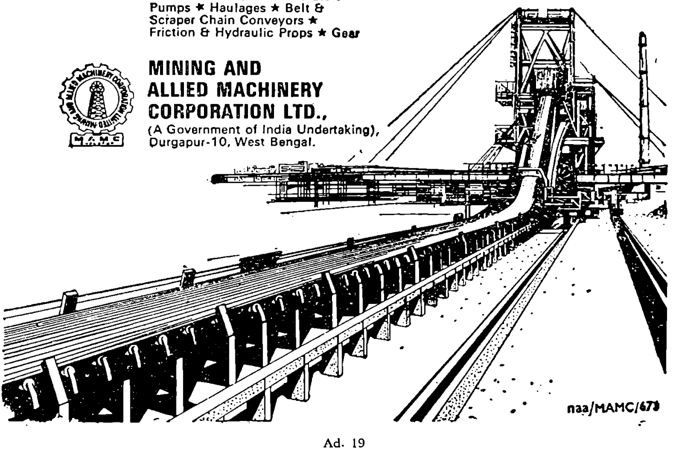

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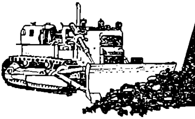

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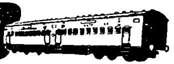

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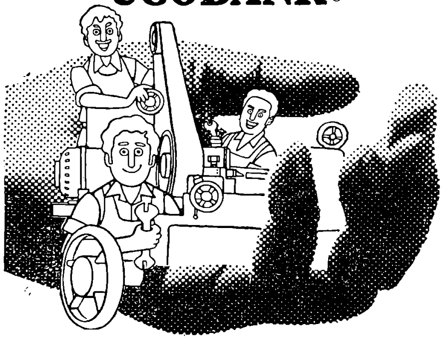

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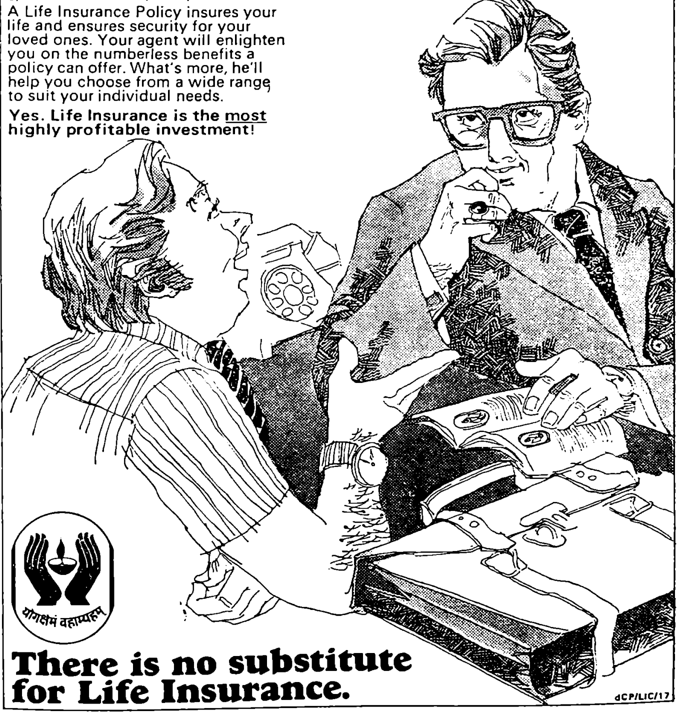

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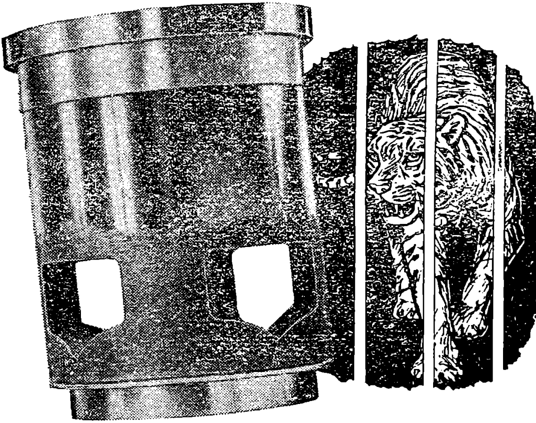

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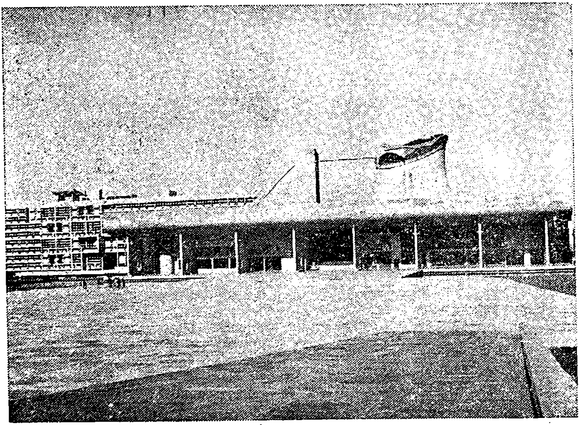

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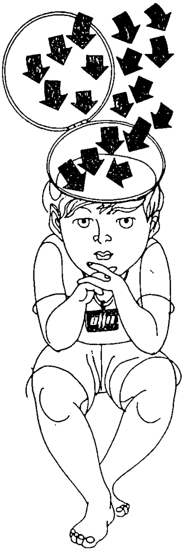

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Ad. 33

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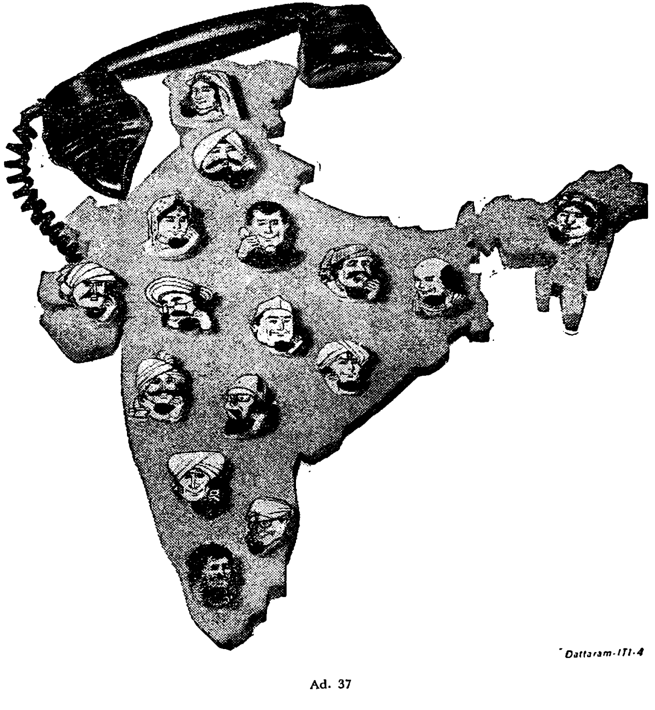

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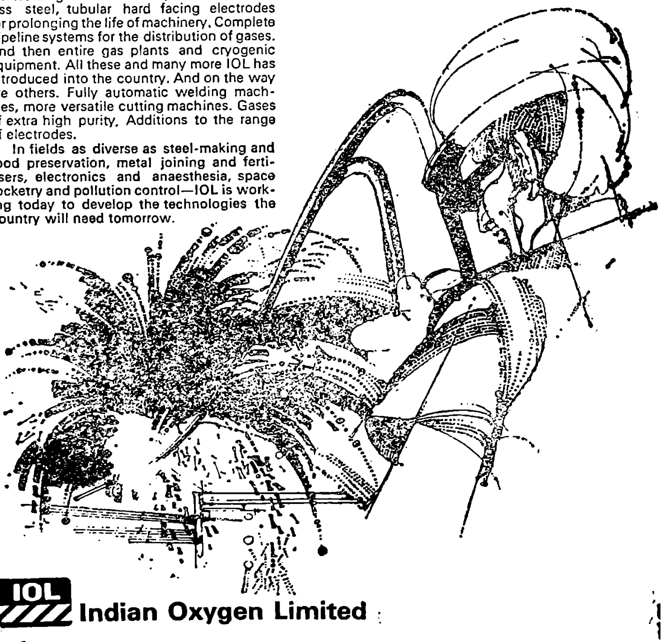

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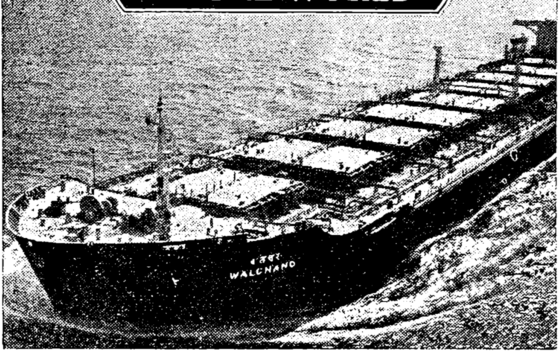

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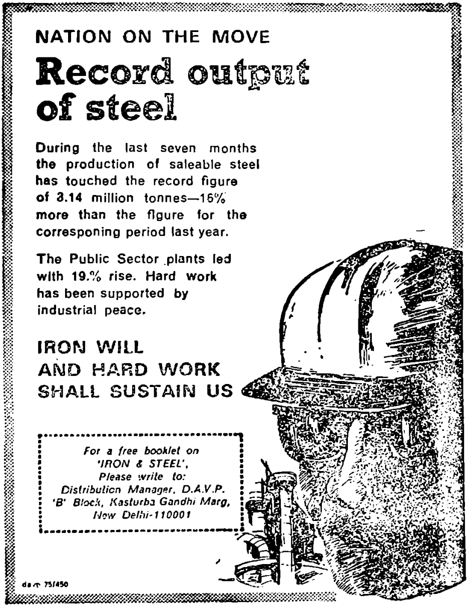
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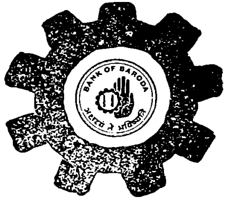

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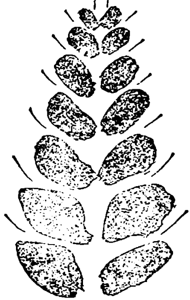

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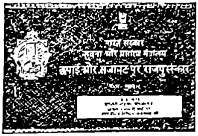

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Ad. 52

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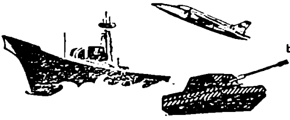

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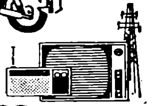

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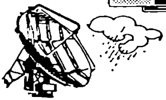

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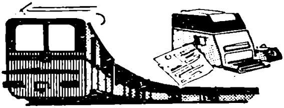

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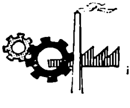

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KERALA TAKES MORE STRIDES TOWARDS SOCIALISM

Public Relations Department
Government of Kerala

Ad. 56

30 SEP 1976

NATION ON THE MOVE

Towards greater comfort and speed

The Indian Railways run more than 10,000 trains every day, with 2,570 sleeper coaches for the long-distance traveller by II Class. And trains are running to time, everywhere. The goods trains carry 5.5 lakh tonnes of freight everyday-essential supplies.

You can help Improve the service. Prevent ticketless travel and pilferage of railway fittings.

IRON WILL AND HARD WORK SHALL SUSTAIN US

For a free booklet on RAILWAYS please write to : Distribution Manager, D.A.V.P., B Block, Kasturba Gandhi Marg, New Delhi-110001

davp 75/455

MADHYA PRADESH FORGES AHEAD
TO
IMPLEMENT PRIME MINISTER'S 20-POINT PROGRAMME

** House sites allotted 8 lakh homeless out of 9.13 lakhs

** Distribution of all surplus land to landless by March 1976.

** Liquidation of irredeemable debts of the rural poor and debt relief for low-income industrial workers.

** Substantial increase in the wages of farm labour.

** System of Bonded Labour Abolished.

** Uniform wage rates for male and female workers.

** Irrigation for additional 4.84 lakh acres during current year.

** Crash programme to raise food production by 27% this year.

** Four-tier committees to implement 20-point Economic Programme.

** Free text books for Adivasi and Harijan students of Class III to VIII.

** Book Banks for Colleges.

** Target of jobs for Apprentices exceeded.

IT IS A REVOLUTION OF THE PEOPLE ,
FOR THE PEOPLE
BY THE PEOPLE

(Issued by Directorate of Information & Publicity, M.P.)

No. DIP 3018/75

Ad. 58

NEW FRONTIERS OF HOPE...

The dawn of Independence way back in 1947 raised the curtain on a new era of intensive development activities in India as well as massive social welfare programmes for the weaker sections of the community. A little later, our Five Year Plans gave an impetus to this welcome trend. With the result, today many avenues of opportunity greet the backward classes.

To boost their economic development, the Backward Classes Finance Corporation—constituted in 1974—undertakes programmes in the fields of agriculture, animal husbandry, and small-scale industry. Institutional finance channelised through the corporation is a manna-like boon to the weaker sections.

In the all-important sphere of education Backward Class students receive increasing attention. The quantum of pre-and post matric scholarships for example, rose from Rs. 96.71 lakhs in 1973-74 to Rs. 103.17 lakhs in 1974-75.

Reservation in training-cum-production centres, free supply of text-books and clothes are other worthwhile concessions that deserve special mention here.

With a view to assisting the voluntary organizations in the State, and coordinating their activities, a special fund—the Social Welfare fund—with a corpus of Rs. 20 lakhs, has been instituted.

On the Social Welfare Day-observed on Jan. 19, 1975 several action-oriented State-wide programmes were launched bringing tangible and immediate relief to the weaker sections.

Verily, they are on the march to New Frontiers of hope and fulfilment.

The Director of Information
and Public Relations
Government of Andhra Pradesh
Hyderabad

IFCI

THE INDUSTRIAL FINANCE CORPORATION OF INDIA

PROVIDES

Medium and long term finance in rupees and in foreign currencies for medium and large industrial projects.

OPERATIONS AT A GLANCE (as on June 30, 1975)

The Corporation has financed 727 industrial projects in a wide variety of industries all over the country with a total net financial assistance of Rs. 507.39 crores.

The Corporation has sanctioned financial assistance of Rs. 157.93 crores for 217 projects in industrially less developed areas and Rs. 115.86 crores to 127 Industrial Cooperatives.

The Corporation has sanctioned financial assistance of Rs. 173.33 crores to 139 industrial undertakings promoted by new entrepreneurs and technologists.

The Corporation has sanctioned financial assistance of Rs. 21.61 crores for 25 projects in the Joint Sector.

SPECIAL FEATURES

The Corporation offers concessional finance for projects in notified industrially less developed areas.

The Corporation offers soft loans for modernisation of jute mills and for the hotel industry.

The Corporation renders advisory services to new entrepreneurs.

ELIGIBILITY

Any limited company, private or public, or a registered cooperative society may apply for assistance.

FINANCIAL HIGHLIGHTS

Subscribed & Paid-up Capital	Rs. 10.00 crores
Reserves	Rs. 22.13 crores

INDUSTRIAL FINANCE CORPORATION OF INDIA
16 Parliament Street
New Delhi-110001.

Davp 806 (23)/76

NATION ON THE MOVE
Rapid rise in exports
India's total exports have gone up to over Rs. 3,300 crores. Ten years ago, it was only Rs. 805 crores.
Quality control has helped to build a better image of Indian goods abroad. Engineering goods earned Rs. 353 crores last year through exports— a new record.
IRON WILL AND HARD WORK SHALL SUSTAIN US
For a free booklet on FOREIGN TRADE please write to: Distribution Manager D.A.V.P., B Block, Kasturba Gandhi Marg, New Delhi-110001

A MAJOR BREAK-THROUGH
IN
SCIENTIFIC STORAGE

THAT IS WHAT WE HAVE ACHIEVED. IT HAS BEEN NO MEAN TASK. IT REQUIRED DEDICATED SERVICE, SPECIALIST SKILL AND ATTENDANT FACILITIES

ALL THAT WE HAVE:

WE HAVE A NET-WORK OF 62 WELL EQUIPPED STORE HOUSES, SPREAD OVER THROUGHOUT THE STATE

WE ALSO UNDERTAKE:

Shipping clearance, railway clearance, transportation, Storage and distribution of food grains, CARE cargo, fertilizers etc. etc.

Disinfestation of stock in the Warehouses and also at party's own premises at very moderate rates.

Soil fumigation in the nurseries and gardens.

FOR ANY STORAGE PROBLEM—BANK ON US. WE WILL LOOK AFTER YOU. YES, IT WILL BE OUR PLEASURE.

KERALA STATE WAREHOUSING CORPORATION

P.B. No. 1727

COCHIN - 682016

GRAM: KERWACOR. Phone : 31537/35069

T O

HEIGHTEN RURAL ECONOMY

AND

BRIGHTEN RURAL HOMES

Rural Electrification Corporation (REC) has so far sanctioned OVER Rs 507 CRORES for the extension of power to rural areas including Harijan bastis in the country.

Todate, 1,126 projects have been sanctioned to electrify 92,292 villages, energise over 7,36,000 pumpsets and more than 1,16,000 rural industries in 21 States.

In addition, 109 special projects have been sanctioned for extending electricity to 10,460 Harijan bastis.

RURAL ELECTRIFICATION CORPORATION LIMITED

(A Government of India Undertaking)

Grams: RECTRIC ● D-5, N.D.S.E. Part-II. NEW DELHI-110049.

20-POINT PROGRAMME

IN

HIMACHAL PRADESH

Himachal Pradesh is the First State in the Union of India which have given five bighas of agricultural land to every landless agriculturist and 100 Sq. yard house-site to all rural houseless persons in the State.

HIM LOK SAMPARK

Ad. 64

FIRST TIME IN INDIA DIFFICULT TO GET NOW MADE EASY

BY

EVEREST QUALITY TOOLS

1. Heavy duty pipe wrenches in size 14″, 18″, 24″, 36″ and 48″
2. Chain Pipe Wrenches in size 3″, 4″, 6″ & 8″
3. Bearing Puller—2 & 3 legged
4. Vice Grip Plier size 10″
5. Diagonal Wire Cutters in size 6″, 8″ & 10″
6. Bolt Clipper in size: 18″, 24″ and 30″
7. Multispanner
8. Multisnip

HINDUSTAN EVEREST TOOLS LIMITED
61 SUNDER NAGAR
NEW DELHI 110003.

GRAM: GRIPFAST PHONE: 617245/46 TELEX: 031-2566 HDTOOLS

COOPERATIVES AND INDIAN ECONOMY

National Cooperative Development Corporation has been playing a pivotal role in the planning and promoting programmes through the cooperative societies for the production, processing, marketing, storage, export and import of agricultural produce, food stuffs and notified commodities.

Let the following figures speak for themselves:

	1962-63	1973-74
Total credit extended to the farmers by cooperative banks	Rs. 327 crores	Rs. 1450 crores
Value of agricultural produce marketed by cooperatives	Rs. 160 crores	Rs. 1100 crores
Marketing of goods by consumer stores	Rs. 72 crores	Rs. 550 crores
No. of cooperative processing units	686	1856
Storage capacity created	11 lakh tonnes	44 lakh tonnes
Agricultural Inputs distributed	Rs. 55 crores	Rs. 500 crores

NCDC is proud to be associated with this progress. It has already invested more than Rs. 145 crores for the development of cooperatives.

NATIONAL COOPERATIVE DEVELOPMENT CORPORATION

(A Government of India Undertaking)

Head Office: **C-56, South Extension, (II), New Delhi-110049**

Regional Office: **Bangalore * Bhopal * Calcutta * Chandigarh * Gauhati * Jaipur * Poona * Patna**

May we introduce ourselves?

The Andhra Pradesh State Electricity Board was formed on April 1, 1959 with an installed capacity of 213 M.W. It has 193,147 consumers of whom 9,236 were agriculturists. Only 177 towns and villages were electrified and the per capita consumption in the State was a meagre 16 units.

Since then there has been a rapid progress and at the end of March, 1975, the Board had:

Installed Generating Capacity (M.W.)	
Hydro	268
Thermal	600
Gas	20
Total	888
Lines (KM)	
Transmission	4,164
Distribution	120,097
	124,261
Distribution Transformers	
Numbers	23,447
M.V.A. ...	1,633.2

Towns & Villages electrified	10,654
Population covered by electricity	72.5%
Consumers connected	1,482,888
Agricultural services connected	275,072
Total connected load (K.W.)	2,791,963
Total H.T. Load (K.W.)	696,185
Per Capita consumption (KWH)	63

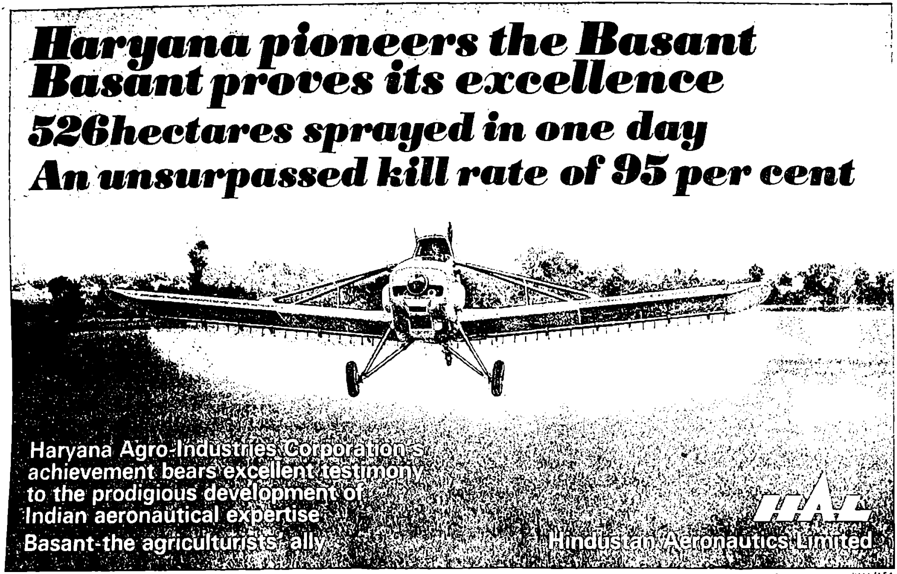
The Board's consumers include paper, textile, cement, chemicals, cotton, fertilisers, heavy industries, port and 2.8 lakh (third largest in the country) agricultural services.

During 1974-75, in its sixteenth year the Board's generation was 3241.76 million KWH and its total revenue was Rs. 74.56 crores.

During the Fifth Five Year Plan, the Board has programmed to electrify 3,750 villages and energise 1.2 lakh pumpsets.

This, in brief, is us.

ANDHRA PRADESH
STATE ELECTRICITY BOARD



Visual Communication/HAL/151

AT THIS RATE, WHAT'S GOING TO HAPPEN TO INDIA IN THE NEXT FIVE YEARS?

This is a question we always ask ourselves. For, in Escorts, we make it a point to prophesy. To foresee trends — sociological and economic. To anticipate needs.

The Company believes that its products, its services, its progress must be sociogenic. Dictated by national needs. For over 30 years it has always been so. Escorts' products all answer the core needs of the country — agriculture, transport, industry and exports.

And with the insight that the Company's monitors have gained through the years, Escorts has an answer to the question: What's going to happen in the next five years? One word: Progress.

EL-4110

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A Nation's life line

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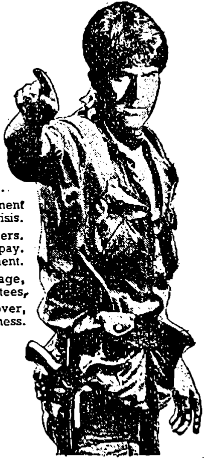
Registered Office:

13th Cross, Kalidasa Road, V.V. Mohalla, MYSORE-570 002.

Madras Office:

Mysore Bank Building, 377, N.S.C. Bose Road, MADRAS-600 001.

When he takes over his country, who pays you?



Revolution isn't good for an export business.
A coup that gets a two-line mention in the Indian newspapers might get an exporter into serious trouble in that particular country.

The new government may pay. Or may not. Or delay the payment so much that it will throw an exporter into grave crisis.

ECGC can cover your exports against such risks. And others. Like your buyer's protracted default to pay. His insolvency. Moratorium on payments by your buyer's government.

Other services of ECGC include extended credit coverage, and performance guarantees.

If you read about a coup tomorrow, relax. With an ECGC cover, it won't kill your export business.

EXPORT CREDIT & GUARANTEE CORPORATION LIMITED

(A Government of India Concern)
REGD. OFFICE: Express Towers, 10th Floor, Nariman Point, Bombay-400 021.

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CALCUTTA: Tata Centre, 10th Floor, 43, Chowringhee Road, Calcutta-700 016.
NEW DELHI: Chaudri House, 10-A Kasturba Gandhi Marg, New Delhi-110 001.
MADRAS: Indian Bank Building, 1st Floor, 17, North Beach Road, Madras-600001.
COCHIN: Chathuruthi Bldg, 1st Floor, Mahatma Gandhi Road, Ernakulam, Cochin-682011.

ECGC-66

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For Textiles, Paper, Viscose, Silk, Wool and Man Made Fibres. Acid Dyes, Direct Dyes, Tulathols. Tulabases, Sulphur Black (Grains & Powder), Tulagenes (Rapid Fast), Tula Disperse Liquids, Oil Dyes, Food Dyes.

FLUORESCENT WHITENING AGENTS

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Swetak MNA (for Textiles)
Swetak NR (for Polyamides)

INORGANIC CHEMICALS

Sulphuric Acid, Oleum 25%
Chlorosulphonic Acid, Oleum 60%
Hydrochloric Acid 30%
Caustic Soda Lye (Rayon Grade)
Caustic soda Flakes (Rayon Grade)
Potassium Hydroxide Flakes
Liquid Chlorine, Phosgene Gas,
Dicalcium Phosphate (Dentifrice Grade)
Dicalcium Phosphate (I.P.)
Phosphorous Oxychloride
Phosphorous Trichloride
Sodium Thiosulphate (Crystal and Powder)

WEEDICIDES

4-D, Sodium (Technical),
4 Dichlorophenol

PHARMACEUTICALS

Quiniodochlor, Nikethamide I.P.
Saccharine USP
Saccharine Sodium I.P.
Sulfadiazine IP.
Halazone N.F. Sulphathiazoled BPC
Menadione I.P. Acetomenadione I.P.
Menadione Sodium Bisulphite I.P.

INTERMEDIATES

Methyl Dichloro Acetate
Tolyl-p-Sulfonyl Ethyl Carbamate
Para Chlorobenzene Sulfonamide
Orthotoluene Sulfonamide
Paratoluene Sulfonamide
Paratoluene Sulfonyl Chloride

DYES INTERMEDIATES

B.O.N. Acid, Chicago Acid, G. Salt, Gamma Acid, H. Acid, J. Acid, J. Acid Urea, Metanilic Acid, Peri Acid, Phenyl J. Acid, Phenyl Peri Acid, Rhoduline Acid, Schaeffers Acid, Sodium Napthionate, Sulfanilic Acid, Tobias Acid.

For your requirements, you may please contact

SALES DEPARTMENT

THE ATUL PRODUCTS LIMITED

P. O. Atul, Via. Valsad (Gujarat), INDIA.
Cable : TULA, Atul. Phone : Atul 62. 63 & 64.